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Supreme Court, U.S.
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No. _____

# In The Supreme Court of the United States

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WILLIAM ALLAN WARE, ET AL.,
*Petitioners,*

v.

FEDERAL HIGHWAY ADMINISTRATION, ET AL.,
*Respondents.*

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On Petition for Writ of Certiorari to the United States Court of Appeals for the Fifth Circuit

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## PETITION FOR WRIT OF CERTIORARI

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Date: April 17, 2008

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## QUESTIONS PRESENTED

- 23 USC §109(i) directs for federal-aid highway noise standards
- 23 CFR 772 and the 1995 FHWA Policy Guidance implement the federally funded (80-90%) regulatory regime for "noise standards" and for a scientific benefit-and-cost based "noise abatement criteria"
- NEPA §4334 and §4335 expressly disallow the nullification of obligations to comply with other agency environmental criteria and standards of environmental quality
- 23 CFR 771 implements NEPA procedures for federal aid highway projects

**Question 1**

A. Do NEPA procedures "subsume," and thus invalidate, the 23 USC §109(i) noise standards and implementing regulatory regime, or nullify an obligation to comply with such regulatory regime?

B. Are the Respondents in noncompliance with the 109(i) noise standards if they refuse to disclose in the noise analysis record both (1) the identified full count of all noise impacted residences and (2) the identified counts of benefited residences under various noise mitigation strategies?

C. Should the CFR 772 public health based "noise impacts"—that are above the maximum ceiling levels and that can not be mitigated with an allowable budget—be considered as "significant impacts" in the language of NEPA?

**Question 2**

Does NEPA or the APA preempt a Fifth Amendment claim against a federal-aid highway for noise pollution or property damage under nuisance and inverse condemnation theories?

**Question 3**

Does the repeal of specific legislation conferring federal jurisdiction over state agencies as to Environmental Streamlining projects oust jurisdiction from the federal court hearing the case before repeal? What if the repeal is replaced with similar and stronger conferring language?

## PARTIES TO THE PROCEEDING

### Petitioners

The Petitioners, who were petitioners in the appeals court, are husband and wife, and are both experienced, self-employed consultants in the various energy business segments. They claimed standing to represent their environmental and real property interests, as well as that of other similarly situated stakeholders along the reconstructed interchange including the numerous multi-family townhouse and condominia adjacent to the project and the majority stakeholder, the City of Houston parklands, being Memorial Park, Weiss Park, and the Houston Arboretum & Nature Center (a wildlife sanctuary). The City of Houston parklands and arboretum comprise the majority of lands immediately abutting the reconstructed interchange. Respondents claimed standing as residents and as users of the parklands damaged by the design of the interchange and its resulting air and noise pollution that remains largely unmitigated for many homeowners and the parklands. [To date the City of Houston has elected not become involved in this proceeding. The City of Houston has lost significant amounts of parklands due to highway construction in the past, with the most recent major loss occurring in 2002 resulting from litigation brought by holders of a right of reverter in a different major Houston city park. The affected parklands in this instant case are also subject in large part to reverter in favor of several major entities. To the best of Petitioners' knowledge, the principal trustee of that interest is Daughters of the Republic of Texas, a nonprofit organization, and the legal and beneficial reversionary heirs are the successors to the Estate of Ima Hogg, *et al.*]

**Respondents**

The real and indispensable parties to this action are governmental entities and persons with capacity to act in the listed roles on behalf of the United States and the State of Texas. The identity of several of the indispensable parties has changed since this action was commenced, and the persons current serving in the indicated capacities are listed.

The United States Federal Highway Administration; Achille (Al) Alonzi, in his official capacity as Acting Division Administrator of the Federal Highway Administration Texas Division; J. Richard Capka, in the official capacity as Administrator of the Federal Highway Administration; the United States Department of Transportation; Mary J. Peters, in her official capacity as Secretary of Transportation of the United States Department of Transportation; the Texas Transportation Commission, acting as the governing body of the Texas Department of Transportation (TxDOT), and Hope Andrade, in her official capacity as Chair of the Texas Transportation Commission.

## CORPORATE DISCLOSURE STATEMENT

Petitioners are private individuals. There is no parent or publicly held company owning 10% or more of a corporation's stock involved directly or indirectly in this proceeding.

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To hold that the procedural statutes NEPA and the APA preempt a direct constitutional action for inverse condemnation due to noise pollution runs counter to longstanding common law and to FHWA regulations themselves. 109(i) may be more efficient mechanism to avoid cost shifting, but the bar to getting past NEPA and agency deference issues may be so great as to work a taking per se.

**Question 3**

Jurisdictional statutes and legislation seeking to hold state agencies accountable is coming to the fore, particularly for categorical exclusions such as this one, where there is little disclosure and proceedings and documentation are highly informal, and virtually every task and shortfall regarding this federal aid project was delegated to the state. FAHA has codified the SAFETEA-LU provisions which replaced the streamlining provisions of TEA-21 and have created an extensive scheme of delegation of duties and assumption of liabilities, but that model is not exclusive.

The FHWA routinely directs the states how to conduct their operations and reaches into their fisc, and in this case, defends the state for its misdeeds. If a federal agency can make these encroachments without implicating sovereign immunity in a federally funded program, it is time to have this honorable Court and the federal system exercise their control under the APA or other appropriate provisions to ensure compliance with such programs.

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## PETITION FOR A WRIT OF CERTIORARI

Petitioners respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Fifth Circuit.

### Opinions Below – United States Court of Appeals For the Fifth Circuit

The opinion of the Court of Appeals, unpublished, but reported at 2007 U.S. App. LEXIS 26850 (5th Cir. Tex. Nov. 20, 2007), is reproduced in Appendix A (App.A-1-5). The case was argued September 4, 2007, and decided November 20, 2007. The order denying timely petition for rehearing, filed Jan 18, 2008, is reproduced in Appendix C. (App.C-1)

### Opinions Below – Southern District of the State of Texas

On appeal, the circuit court recognized the statutory regime of 23 U.S.C. §109(i) as being separate from NEPA, but "affirm(ed) the judgment of the district court, entered May 30, 2006, for essentially the reasons given in its Memorandum and Order dated September 30, 2005, and its Memorandum and Opinion dated March 15, 2006" (see App.A-5).

The district court's several memoranda and orders are therefore included Appendix B to this petition. These include:

(1) Memorandum and Order dated September 30, 2005 (App.B-1-14); (2) Memorandum and Opinion dated March 15, 2006 (App.B-15-76), 2006 U.S. Dist. LEXIS 15285 (S.D. Tex. Mar. 15, 2006);

(3) Order entered May 30, 2006 (App.B-77-80), 2006 U.S. Dist. LEXIS 34411 (S.D. Tex. May 30, 2006); and (4) Final Judgment entered May 30, 2006 (App.B-81).

**Jurisdiction**

The judgment of the court of appeals was entered on November 20, 2007, (App A-1-5). On January 18, 2008, the court denied petitioners' timely petition for rehearing by the Panel (App-C-1). This Court's jurisdiction is sought under 28 U.S.C. § 1254(1).

**Constitutional, Statutory, and Regulatory Provisions**

The **Questions Presented** invoke the following constitutional, statutory and regulatory provisions:

**Question 1:**

Title 23 USC § 109 – Standards
23 USC § 109(i) [Noise] (App.D-2-3)

National Environmental Policy Act
Sec. 104 [42 USC § 4334] (App.D-9)
Sec. 105 [42 USC § 4335] (App.D-9)

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Federal Highway Administration
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**Question 2:**

U.S. Const. 5th Amend (takings)

**Question 3:**

Sec 1309(f),(g), Transportation Equity Act for the 21st Century (112 Stat 232, Public Law 105-178) (June 9, 1998) **[set forth as Note to 23 USC 109]**

1 USC § 109. "Repeal of statutes as affecting existing liabilities"

Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy For Users "SAFETEA-LU" (119 STAT 1144, Public Law 109-59 (August 10, 2005) Provisions, hereafter (SAFETEA-LU), in particular Sec 6002(b)

## STATEMENT OF THE CASE

The Petitioners ask this Court to grant review of the Questions Presented which arise from the reconstruction and realignment of an elevated interchange in Houston, Texas, built under the Federal Aid Highways Act, Title 23 USC (FAHA). The issues center around asserted noncompliance by Respondents, the Federal Highway Administration (FHWA) and Texas Transportation Commission, the governing body of the Texas Department of

Transportation (TxDOT), with a federally funded traffic noise "standards" statute, 23 USC 109(i), a longstanding, clearly defined implementing regulatory regime, 23 CFR Part 772, and well established policy guidances and the need to reconcile those provisions with the procedural provisions of NEPA.

Other issues for which the writ is sought are whether a Fifth Amendment takings claim founded in inverse condemnation theory is preempted by NEPA. Additionally, whether a special jurisdictional statute is sufficient to confer jurisdiction over TxDOT in the case, and, if so, whether the repeal of that statute and replacement by a similar statute ousts jurisdiction from the federal court system.

## I. Summary of Law in this Case

**Question 1** involves the reconciliation through the APA between (1) 23 USC § 109(i) Standards-Noise statute, its numerical and clearly defined regulations in 23 CFR Part 772 and longstanding policy guidances and (2) the ambiguous and qualitative procedural provisions of NEPA.

Petitioners think the conflicting analyses for the various highway statutes and regulatory is a new issue for the Court. This Court has recently decided several environmental "standards" cases which Petitioners think should frame the analysis for this reconciliation. The result of these holdings is that one statute or regulation will not be "submerged" or "trimmed" to another without clear Congressional intent.

23 USC §109(i) provides in pertinent part: The Secretary (of Transportation), after consultation with appropriate Federal, State, and local officials, shall develop and promulgate standards for highway noise levels compatible with different land uses and after July 1, 1972, shall not approve plans and specifications for any proposed project on any Federal-aid system for which location approval has not yet been secured unless he determines that such plans and specifications include adequate measures to implement the appropriate noise level standards. [emphasis added] (App.D-2-3)

NEPA itself [42 USC § 4334] provides that it is not intended to submerge or subsume another environmental statute. "Nothing in section 102 [42 USC § 4332] or 103 [42 USC § 4333] shall in any way affect the specific statutory obligations of any Federal agency (1) to comply with criteria or standards of environmental quality, (in pertinent part, emphasis added) (App.D-9)

Sec. 105 [42 USC § 4335] provides: The policies and goals set forth in this Act are supplementary to those set forth in existing authorizations of Federal agencies. (emphasis added)

The 23 CFR Part 772 regulations are set forth in their entirety in Appendix D (App.D-10-21), as are pertinent portions of the 1995 FHWA Memorandum and Policy Guidance (App.E-1-7) And Highway Traffic 1995 Noise Guidance and Policies and Written Noise Policies (App.E-8-51, in part) and are discussed in the Noise Analysis section below. The regulations and guidances are longstanding and clearly detail how a noise analysis is to be made, how to count the beneficiaries of noise mitigation

measures, and provide for a liquidated, or budget, amount that can be spent on each beneficiary.

**Question 2** presents the question whether NEPA or the APA preempt inverse condemnation cases brought under the Fifth Amendment. The text of NEPA and the APA do not answer the preemption question, so presumably the Court would find that the preemption does not exist. This Court has in the past found preemption by federal airport noise control regimes, as against state regulatory regimes. The takings tort is essentially founded in state law; it is not based on a regulatory regime. The issue whether 109(i) (rather than NEPA) preempts a Fifth Amendment claim is something the Court may wish to take up, but so far no lower court has insisted that any 109(i) analysis be conducted. 109(i) is not the only standards regime. The standards of 23 USC 109 are varied in nature and presence or lack of a federal preemption for one of the 109 standards cannot really dispose of the question as to all.

**Question 3** presents the issues whether a limited purpose jurisdictional statute (TEA-21 Sec 1309(f),(g)) operates to confer federal jurisdiction over a state agency. If so, does its repeal oust the jurisdiction. While the Court has examined ouster of jurisdiction between two federal courts, the parties were not state agencies. 1 USC § 109. "Repeal of statutes as affecting existing liabilities" bears on the analysis as does the replacement statute from SAFETEA-LU Sec 6002(b) which expressly applies to state agencies and expressly saves all existing obligations as of the date of repeal of 1309. The Court has examined ouster in *Hughes* and *Landgraf*, discussed below, holding that if the jurisdiction implicates substantive rights and is not a mere

reallocation of case load, then retroactivity is not presumed.

The repealed act was replaced with another similar act with stronger conferring language.

The Court could determine that the provision that Petitioners asserted as conferring jurisdiction did not apply in the case of a Categorical Exclusion. Nothing that has been found to date in the legislative history or suggested by the Respondents, however, bears this out.

**Background Physics for Highway Noise Analysis & Policy: Units, Relative Loudness Changes, Propagation, and Spreading**

Noise is unwanted sound. (USCA5-1105). It can be annoying and can interfere with normal conversation. Highway noise can be destructive of property values. Consistent high levels of noise can be damaging to normal hearing. The noise unit , or scale, of measure is dimensionless and is called "decibels" or "dB". This unit is logarithmically scaled to human capabilities. (USCA5-1102) A noise level of "0 dB" is barely perceptible to the average human, and "120 dB" is painfully loud. (see excerpt: USCA5-1106) Other "adjusted" scales, such as dBA, dBB, and dBC, are used to adjust for the inability of the average human to hear different frequencies of sound equally well (bass and treble) at different absolute levels of noise. (USCA5-1103) The "dBA" scale is employed to reflect this human limitation at quiet levels. The "dBC" scale is employed to reflect this limitation at loud levels of noise. The loudness range for all adjusted units is still 0 to 120. A $60 Radio Shack noise meter can measure in both dBA and dBC units. (USCA5-2522)

The FHWA noise standards (23 C.F.R. 772.5(g) Table 1 are expressed in dBA units, and there is a noise standard for four different land uses. (see excerpts: USCA5-1137) (USCA5-1114-1116) The standard for residences, schools, churches, and recreational parks (Category B land use) is 67 dBA. The Leq(h) standard is applied in Texas under FHWA approval. The standard for nature sanctuaries (Category A), such as the Houston Arboretum nature sanctuary, is 57 dBA. The "reality" for these standards is the fact that a human conversation (at 3 feet apart at normal voice levels) is impaired with background noise at 67 dBA. (see excerpts: USCA5-1106)

Because units are scaled logarithmically, by definition a noise level increase of 10 dBA for an average human is equivalent to a doubling of the perceived loudness, or a 100% increase. (see excerpts: USCA5-1105) Asymmetric in appearance, but mathematically correct, a 10 dBA decrease is a 50% reduction in the perceived loudness. A 20 dBA increase is a doubling of a doubling of the loudness , or a 4 times increase or a 400% increase. If the noise level in a nature sanctuary is at 77 dBA, it is 4 times (or 400%) louder than the FHWA and state standard of 57 dBA.

A common mistake is to say that a 6 dBA increase from a starting noise level of 60 dBA would be a 10% (6 divided by 60) increase in the noise level, or loudness. (USCA5-2427) The dBA scale is logarithmic and relative. The correct loudness change is a 52% increase in going from 60 to 66 dBA. The following dBA measured increases are paired with their respective loudness increases: 10 dBA-100%, 9 dBA-87%, 8-74%, 7-62%, 6-52%, 5-41%, 4-

32%, and 3 dBA-23%. The latter is often said to be barely perceptible by average humans (USCA5-1105), but of course it would only take two of these imperceptible, incremental steps (of 3 dBA) to be 52% louder, or one additional step of 3 dBA to be 87% louder. 3 dBA may be said to be imperceptible, but it is still hanging around to add to the next small change – up or down.

Noise propagation out from a noise source, such as a highway, can follow a straight line out to a person, receptor meter, or in noise language a "receiver". "Noise analysis" usually employs predictions of noise at 5 feet above the ground to approximate a standing person.

If you know the noise level at a known distance out from a "single point source" of noise, like a horn or a bell, then the noise level at other distances away from the horn can be estimated by using a decline rate of 6 dBA per doubling of the distance away from the horn. If the noise level is known to be 77 dBA at 100 feet from a horn, then the noise level at 200 feet out from the horn should be around 71 dBA. This follows the well known "inverse square law" of sophomore physics adjusted for the logarithmic scale. A common mistake, is not to make the logarithmic adjustment.

Another mistake is to consider highway traffic a "single point source" of noise. It is really a continuous line of point sources, or a "line source" of noise. For this situation, the same laws of physics say that the decline in noise levels out from a continuous line source will be 3.0 dBA per doubling of the distance in a world with no air or ground absorption of the noise. (USCA5-2107) If you allow

for ground and air to absorb some of the noise, then the decline factor would increase from 3.0 up to 4.5 maximum for very soft flat ground. The effect of air is small. If the ground cover is hard like pavement, then the factor is nearer to 3.0. If the highway or "line source" of noise is elevated, then the effect of soft ground is reduced significantly. (USCA5-1104, see excerpt)

Noise propagation or spreading is complex. (USCA5-2526-2527) Noise can be reflected from surfaces (pavement, walls, buildings, roofs), it can bend or diffract over walls and around corners, it can be absorbed by the ground or air, and it can bend or refract up or down significantly with weather conditions. Hourly changes in temperature inversions and wind direction and speed can greatly magnify or diminish noise levels by up to 15 dBA over distances up to 2 miles away from a noise source. For this reason, personal observations can be quite varied and are unreliable indicators.

## III. Regulatory and Technical Explanation Regarding Noise Standards, Noise Abatement Criteria (NAC), Noise Analysis, Predicted Noise Impacts, Abatement Benefited Homes Or Receivers, Performance or Benefit and Cost Based Budgets

23 CFR 772 Procedures For Abatement of Highway Traffic Noise (App.D-10-22)

**772.7(a)**: "This regulation applies to all Type I projects

**772.5(h)**: "Type I projects...Federal-aid highway project on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes.

**772.3**: "The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this regulation constitute the noise standards mandated by 23 USC 109(i)." (emphasis added)

FHWA Highway Traffic Noise Analysis & Abatement Policy & Guidance, 1995,(App.E-1-64) including cover letter dated June 12, 1995 (App.E-1-3)

Predicted traffic noise levels at various distances out from a highway are the output from the FWHA approved (772.17), science-based computer model (TNM, Traffic Noise Model Version 2.5 is latest) that takes as input both the highway or roadway design configuration (elevated lanes, depressed lanes, at grade lanes, lanes for each direction of traffic, lanes and shoulder widths, incline and decline grades, noise walls at the highway's edge, noise walls at the neighborhood boundary out from the highway's edge, etc) and a set of assumptions (expected hourly counts of 5 vehicle types (large trucks, medium trucks, buses, motorcycles, and all others including autos, SUVs, vans, & regular trucks), vehicle speeds for each lane, road surface type or pavement tining or grooving, and several other variables of less importance).

The noise abatement criteria (NAC) define the exterior noise level ceilings allowed for 3 land use categories: 57 dBA for land uses requiring quietness, such as the Houston Arboretum Nature Center a stakeholder in this case; 67 dBA for homes, schools, & regular parks such as Memorial Park a stakeholder in this case; and 72 dBA for commercial areas. A "traffic noise impact, 772.5(g)" exists at each home or location where either (a) the predicted noise level exceeds the land use noise level ceiling or (b) the predicted noise level exceeds substantially the existing noise level by more than 10 dBA in Texas. (The FHWA allows 10 to 15 dBA.)

The noise standards seek to abate all traffic noise impacts with a proposed abatement scheme if it can meet two tests: the feasible test (engineering constraints) and the reasonable test (which means incorporating performance or benefits and costs). The abatement schemes can include traffic management (slower speeds, less vehicles); alteration of horizontal or vertical alignment (depressed highways); acquisition of buffer zones; pavement types (quiet pavement); and noise barriers (earth-berms, noise walls, noise walls along the edge of the highway, walls out from the highway at the neighborhood boundaries, sound absorbing noise walls, covered highways, or noise tunnels).

> "772.9 Analysis Of Traffic Noise Impacts and Abatement Measures (App.E-13-14)
> (a) The highway agency shall determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts, giving weight to the benefits

and cost of abatement, and to the overall social, economic, and environmental effects.
(b) The traffic noise analysis shall include the following...
(5) Examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts"

The determination of the count of traffic noise impacts on residential units includes all homes impacted, not just those impacted on the boundary. This is particularly necessary when there are elevated highway main-lanes.

772.9(b)(5) above means that the goal of 772 is to look for an abatement scheme (which can be a combination of measures) that reduces to zero or at best minimizes the count of impacted homes after an abatement scheme is applied – all within performance-effective and cost-effective constraints.(USCA5-1553) Only those homes that see a reduction of their predicted noise levels by at least 5 dBA in Texas (FHWA allows 3 to 5 dBA) are counted as abatement benefited homes. This is the performance or benefit part of the cost benefit analysis.

For any possible abatement scheme, the computer model allows a count of benefited homes to be determined. This can be done by producing noise contours or it can be approximated with noise prediction locations being a proxy for all the nearby homes. This count of benefited homes is multiplied by $25,000 per home in Texas (FHWA allows from $15,000 to $50,000) to produce the budget allowed

for that mitigation scheme. In essence the procedure is an iterative optimization to find the mitigation scheme that minimizes those homes that remain noise impacted.

The FHWA emphasizes that all noise abatement issues and schemes are to be examined early before final design (including depression, tunnels, and various wall heights, types, and placements at the boundary or at the highway's edge) to find the best solution that minimizes the count of noise impacts given the performance and cost budget constraints.

> "The method used to count residences should include all dwelling units, e.g., owner- occupied, rental units, mobile homes, etc., that are "benefitted," regardless of whether or not they were identified as impacted. A State should define the threshold of noise reduction which determines a "benefitted" residence. This threshold should be within the range of 3-5 dBA." FHWA Highway Traffic Noise Analysis & Abatement Policy & Guidance, cover letter dated June 12, 1995 (App.E-3) (emphasis added)

## IV. The District Court Actions and Decisions – Summary of Holdings

**The District Court: Question 1**: The district court used NEPA procedures and concepts to determine Petitioners' 109(i) claims; no analysis was made anywhere of 109(i). The lower court determined 109(i) to be "subsumed" by NEPA.

"The plaintiffs inquire about the status of their claim under 23 U.S.C. § 109(i). This court dismissed these claims in the Memorandum and Order issued on September 30, 2005." (See Docket Entry No. 64 at 7–8). [Petitioners as well as the appellate court treat the statement that the court dismissed these claims as a mistake or scrivener's error: the Memorandum and Order referred to read: "The Federal Defendants' motion to dismiss the FAHA and NEPA claims under the APA is denied..." (DE#64, p. 13; App.B-14)]

"Any remaining elements of this claim were subsumed into the NEPA analysis in this court's more recent Memorandum and Opinion." (Docket Entry No. 77)." (App.B-78)

The Memorandum and Opinion dated 3/15/06 (App.B-15-76) makes reference to Petitioners' 109 claim (App.B-18) but does not analyze or mention the statute again until the determination is made upon reconsideration that the claim is subsumed by NEPA.

**The District Court: Question 2**: The district court dismissed Petitioners' Fifth Amendment claim ruling that it reiterate(s) the same claims that are properly invoked under the APA and NEPA (Memorandum and Opinion, in part, entered 3/15/06, App.B-27-28)

**The District Court: Question 3**: The district court held "This court denies the motion to reconsider its earlier conclusion that the plaintiffs cannot sue the State Defendants

under the ISTEA. Plaintiffs cite section 1309 of ISTEA to support their argument. Section 1309 does not provide a private cause of action against the State Defendants. Instead, section 1309 addresses state highway commissions, such as TXDOT, in relation to certain federally-funded highway projects that receive streamlined approval procedures. The IH-610 Rehabilitation Project and the IH-610 interchange with IH-10 at issue in this case are not covered by section 1309." Memorandum and Order, in part, entered 3/15/06, App.B-23)

## V. The Court of Appeals Decision

**The Court of Appeals: Question 1**: The Panel recognized a statutory and regulatory regime for traffic noise (23 USC 109(i)-Noise standards and 23 CFR Part 772) separate from the general provisions of NEPA, and it recognized that plans had to be included as a condition precedent to funding, but by not directing the lower court that an analysis separate from the CE determination under NEPA was required for 23 USC 109(i), it affirmed the lower court's conclusion that treatment of traffic noise standards could be made wholly under NEPA thereby invalidating the statutory and regulatory regime. As noted in their petition for rehearing, Petitioners think that the Panel may have overlooked this Court's analyses in recent environmental "standards" cases as well as the specific statutory provisions of NEPA itself.

**The Court of Appeals: Question 2:** The Panel also affirmed without comment the dismissal by the district court of Petitioners' claim against the

Federal Defendants for a taking in violation of the Fifth Amendment. The lower court, *infra*, had held that the claim was precluded by reason of the NEPA statutory regime and/or the APA. (refer district court Memorandum and Opinion, in part, entered 3/15/06, App.B-27-28)

**The Court of Appeals: Question 3:** The Panel affirmed without comment the dismissal of a jurisdictional claim over the State Defendant highway agencies based on certain specific provisions of TEA-21 as to Petitioners' Federal Aid Highways Act claims brought under the Administrative Procedure Act.

## VI. The Court of Appeals Denial of Rehearing

Petitioners' timely petition for rehearing was denied on January 18, 2008. App.C-1.

## REASONS FOR GRANTING THE PETITION

### Question 1

Even though the appellate court recognized a separate statutory and regulatory scheme existed for noise and that NEPA was merely a derivative remedy for Petitioners for their noise impacts, to the extent the Panel did not require Respondents to perform a separate analysis and develop a mitigation budget, the Panel decision essentially affirmed the district court's decision that 23 USC 109(i) Noise Standards and its implementing regulatory regime is "subsumed" by NEPA. The net effect is the position implicitly invalidates 23 USC 109(i) Noise Standards statute; the clear and longstanding sequential provisions of its implementing regulatory regime in 23 CFR Part 772; and the express statutory provisions of NEPA itself, 42 USC §§ 4334 and 4335.

A "subsumed" interpretation conflicts directly with this Court's longstanding principles of construction and with this Court's recent decisions regarding environmental "standards" in *Whitman v. American Trucking Associations*; *National Assn. of Home Builders (NAHB) v. Defenders of Wildlife*, *Environmental Defense v. Duke Energy Corp*; and *Engine Mfrs. Ass'n v. South Coast Air Quality Mgmt. Dist.*, each below.

The National Environmental Policy Act (NEPA), 42 USC § 4321 et seq, provides expressly that NEPA does not replace any existing environmental standard or criteria. 42 USC §§ 4334 and 4335.

42 USC § 4334 states in pertinent part:

"Nothing in section § 4332 or § 4333 of this title shall in any way affect the specific statutory obligations of any Federal agency (1) to comply with criteria or standards of environmental quality" (emphasis added) ...:

42 USC § 4335 provides that

"the policies and goals set forth in this chapter are supplementary to those set forth in existing authorizations of Federal agencies."

**Case law**

Several intervening cases from this Court treat the meaning of environmental "standards." These cases support Petitioners' argument that there should be an express determination that noise standards are to be analyzed separately from NEPA. Though none of these environmental standards decisions specifically involve noise standards, Petitioners assert that this Court would, in all likelihood, employ the same or similar plain text analysis.

The 109(i) clear and substantive noise standards regime, although involving the physics of noise, is not remotely on par with the difficult questions this Court has had recently to face regarding the boundaries of science and technology and economic predictions presented by litigants in EPA standards cases.

Moreover, in this case, there is a well defined statute 23 USC 109(i) Standards-Noise structured much like other standards statutes requiring the promulgation of quantitative traffic noise ceilings or noise abatement criteria (NAC) and incorporation, as a condition precedent, of "adequate measures in the plans and designs to meet those standards.

Further unlike elusive best available technology and performance standards, there is a longstanding, well defined regulatory regime for traffic noise and there are two specific statutes in NEPA that state that NEPA is not designed to replace these criteria, but rather only to supplement them. Finally this Court has recently examined several of these environmental standards cases, and Petitioners assert that the analysis in this instant case, if anything, should be even more straightforward and the statute, its implementing regulations, and the two NEPA statutes, must be examined separate from and prior to rolling the whole inquiry into NEPA procedural analysis requiring only "consideration" of noise impacts.

109(i) and its regulations present a clear directive to develop standards and include adequate measures in federally funded highway projects to meet those standards, methodology and an accepted model for predicting traffic noise, a clear methodology for calculating the count of residences which would benefit from traffic noise mitigation, and a clear path to develop a liquidated noise mitigation budget process. The step most in jeopardy by finding that the scheme is subsumed by NEPA is the failure to calculate the number of persons who would benefit from noise mitigation. In the instant case science was cast aside regarding

the computation of beneficiaries. Utilizing NEPA, the Respondents were able to fuzz up the sequencing of the process and their presentment of the results. Nowhere in the record, nowhere, did they claim that what they did constituted adequate measures. They only asserted that the noise wall offered was the only reasonable and feasible measure. The 109(i) regime would dictate that the "reasonable and feasible" conclusion is an ending, it cannot be reached until the beneficiary budget is calculated in accordance with longstanding regulations and policies. Once the number of beneficiaries is calculated, the liquidated amount is multiplied by the number of beneficiaries, then the agency may make the determination, but the determination has to be made prior to the design choice or included in the design. With 109(i), the state agency does not have the option to pick a design, then state that because of the design they picked, there is no feasible way to mitigate the noise. Further the records shows no indication whatsoever that alternatives were examined, and the contractor that designed this hugely important interchange, Parsons Brinckerhoff, certainly has the design skills to design just about anything.

As highways get higher and wider, as traffic noise is being thrust further into neighborhoods , as state highway departments seek to avoid accountability for major federal projects through more widespread use of Categorical Exclusion classifications to avoid following 109(i) regulations, and they continue to use 19th century reflective noise walls rather than more modern effective mitigation methods, more impacted residents will present constitutional or statutory inverse condemnation challenges to get substantive redress for damage to their homes, health, and property values.

**B. Legal Analysis –**

In *Whitman v. American Trucking Associations*, 531 U.S. 457 (2001), this Court used a plain text analysis in a "standards" case. 23 USC 109(i) has a similar two-part standards structure: numerical noise abatement criteria (NAC) and a requirement of the incorporation of adequate measures.

Of the recent environmental standards cases, Petitioners assert the most on point in addressing the *"subsumed"* issue is *National Assn. of Home Builders (NAHB) v. Defenders of Wildlife*, 168 L.Ed. 2d 467, 485 (2007) (decided with *EPA v. Defenders of Wildlife*). In *NAHB*, the Court, using canons of statutory construction, examined (a) whether a specific statute was "submerged" into an after-adopted general statute (*cf.* the lower court ruling here that the requirement of a separate noise standards was "subsumed" by NEPA); (b) the mandatory nature of the word "shall"; and (c) the disfavored doctrine of "repeals by implication," *id.* Majority and dissenters alike agreed that "shall" is generally imperative or mandatory. The majority found that CWA §402(b) and the later-adopted ESA §7(a)(2) "requires us to mediate a clash of seemingly categorical -- and, at first glance, irreconcilable -- legislative commands." *Ibid*, 484. Further, "a statute dealing with a narrow, precise, and specific subject is not submerged by a later enacted statute covering a more generalized spectrum." *Ibid*, 485 (emphasis added). Further, "repeals by implication are not favored", id, and will not be presumed unless the "intention of the legislature to repeal [is] clear and manifest." *Id.* Following the *NAHB* analysis,

presumably the more specific 109(i) is not "submerged," or "subsumed," into NEPA.

In *Environmental Defense v. Duke Energy Corp.*, 167 L.Ed. 2d 295 ( 2007), the Court affirmed the doctrine against implicit invalidation of regulations. While *NAHB* discussed statutes, *Environmental Defense v Duke* treated whether one regulatory scheme could be "trimmed" to conform to another.

The *Duke* Court analyzed the word "modification" which appears in both of two CAA emissions control schemes, NSPS and PSD. The PSD permitting language even referred back to the section defining "modification" for NSPS purposes. Nevertheless, the Court held that even though the term was the same, its analysis of the term need not be identical for the two separate schemes. The Court held the effort to "conform" or "trim" PSD regulations to NSPS counterparts on "modification" implicitly invalidated the PSD regulations; *ibid*, 307. In similar manner the words noise "impacts" in the specific substantive Part 772 regulations cannot be "trimmed" to the general NEPA procedural requirement to give "consideration" to "impacts" of an environmental, social, or economic nature.

The lower court's sole use of NEPA analysis to dispose of Petitioners' § 109(i) claim conflicts with holdings in both *NAHB* and *Duke* by "submerging" §109(i) into NEPA, notwithstanding plain text of the statute and "trimming" or implicitly invalidating, the specific regulatory regime regarding noise standards and impacts in 23 CFR Part 772.

Further, in *Engine Mfrs. Ass'n v. South Coast Air Quality Mgmt. Dist. (SCAQMD)*, 541 U.S. 246, 252-256 (2004), wherein the Court through Justice Scalia defined "standards" and warned against "conflating" "standards" with "enforcement of standards." This case would support that the numerical noise standards exceedances and the noise mitigation budget have to be calculated before the issue of reasonableness of mitigation (or compliance) can be reached; the two issues and regulatory mandates cannot be skipped or conflated in the name of general NEPA analysis.

**The treatment of science in the record as an issue**

Petitioners ask this Court to examine a subissue: is the administrative record the governing tool for review under the APA or are the statutes and regulations for which judicial review is sought.

What does the Administrative Record indicate about the decisions and claims made by the highway agencies?

It is patently obvious that the administrative record itself indicates that significant decisions and claims by the highway agencies have been "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law". No outside facts are required to impeach these actions of the highway agencies.

First, the noise abatement criteria, or land use NAC for the Arboretum and Nature Center is plainly a land use category A which calls for a ceiling standard of 57 dBA. The only predicted noise level

next to the Arboretum is 77 dBA, reported in the 1992 CE Report. Because of the new tining on the road, this number should be higher by at least 3 dBA. However, accepting the Respondents' 77 dBA, this is 20 dBA above the NAC 57 dBA ceiling. This means we have a noise level exceedence 4 times louder than the NAC ceiling. The Arboretum thus has a massive unmitigated noise impact occurring everyday, and the Park officials have been very poorly advised as to their alternatives.

Second, based upon the 2004 Reevaluation noise analysis predictions for the Petitioners' neighborhood, it is also obvious that the administrative record itself proves that the highway agencies have been "arbitrary, capricious, or otherwise not accordance with the law" regarding compliance with the noise abatement criteria and noise standards. The predicted level of noise for the Plaintiff's perpendicular street 300 feet out from the elevated (35 feet) IH-610 main-lanes is 76 dBA. This location is where the offer was made for 16' high noise walls. Simple physics and common sense show that a 16' wall does not shield any noise coming from a 35' high elevation except for those locations right behind the wall. Applying the simple attenuation formula described earlier for noise coming from a line source of noise, the projected noise levels along the Petitioners' street would be somewhere among these numbers for sound levels of noise with distances shown below. This is applying the line source rule mentioned before based on a decline of 3dBA decline per doubling of the distance over water or hard paved surfaces or a 4.5 dBA decline over very soft ground surfaces. The Petitioners' surface is hard concrete street pavement.

| | |
|---|---|
| 300 feet out | 76 dBA predicted by agency model |
| 600 feet out | 73 to 71.5 dBA predicted with sophomore physics model |
| 1200 feet out | 70 to 67.5 dBA predicted with sophomore physics model |
| 800 feet out | approximately 72 to 70dBA extrapolated |

From Respondents' data, this means that there many more homes that are impacted and are not receiving mitigation as called for in the regulations and policies for all impacted residences.

Even more troubling, the TxDOT produced a predicted noise level of 58 dBA back in February 2004 for Petitioners' home. (USCA5-1034) There is no way in Newtonian physics that the noise level value can fall from 76 dBA to 58 dBA in 500 feet with out any shielding. This is absurd. TxDOT's noise analysis is faulty, not believable, and deserves no deference. Petitioners are not doing their own noise analysis, merely they are interpreting Respondents' results. How Respondents got to those results is not in the record.

**Question 2**

Dismissal of Petitioners' Fifth Amendment takings claim (inverse condemnation resulting from the nuisance of traffic noise) brought directly under the Constitution against the Federal Defendants (1) for lack of a physical invasion and (2) on grounds of preemption by the APA or NEPA is not founded in

law and is contrary both to this Court's and Texas law regarding takings as well as the express policies and practices of the Federal and State Respondents.

A takings claim further would allow Petitioners to escape the shackles of the ad hoc administrative record for this Categorical Exclusion proceeding, to get to the facts, and have a court listen to specific fact questions surrounding this case unconstrained legally by Respondents filings to their uncertified record. The nonregulatory claim would allow examination of the situation in Petitioners' neighborhood that only persons on the boundary were given an opportunity to participate in noise mitigation when the highway clearly will spew noise far beyond the neighborhood boundary; and that only first floor residents along the boundary were included in the noise budget

**Lower court holding**

The appellate court affirmed the district court's denial of a motion for reconsideration of the dismissal of a Fifth Amendment claim against the Federal Defendants ruling that

> "Plaintiffs' complaint does invoke the Fifth Amendment (see Docket Entry No. 37, ¶¶ 145 et seq.), but these sections of the complaint reiterate the same claims that are properly invoked under the APA and NEPA. The plaintiffs' own submissions to this court undermine their ability to claim that they suffered a "taking" cognizable under the Fifth Amendment. A taking claim requires a physical invasion of the plaintiff's land by the government,

or government regulation that has denied the plaintiff "all economically beneficial or productive use of land." *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015 (1992). The plaintiffs have not alleged facts that, if proven, would make either showing. Because the plaintiffs have not stated a "taking" claim for which relief could be granted, this court denies the motion to reconsider its grant of the defendants' motion to dismiss the Fifth Amendment claims." Memorandum and Opinion, in part, entered 3/15/06, App.B-27-28.

**Inverse condemnation theory is based on this Court's application of common law rather than on its regulatory takings analyses.**

Petitioners assert that Lucas, a regulatory takings case, does not apply directly to the Petitioners' inverse condemnation claim.[1] Rather Petitioners assert that traditional state-based common law theories of nuisance (or even trespass on the case) apply rather than a regulatory takings analysis. In Texas such common law theory is well recognized. See e.g. *City of Abilene v. Downs*, 367 S.W. 2d 153, 161 (Tex. 1963) (stench and bugs from municipal works). Inverse condemnation suits are regularly maintained against governmental agencies,

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[1] Although Petitioners disagree with the applicability of the regulatory taking analysis, by their reading, Lucas has been modified, in particular by Palazzolo v. Rhode Island, 533 US 606 (2001).

particularly state governmental agencies such as highway departments and flood control districts.

Petitioners' nuisance inverse condemnation argument is simple. The Fifth Amendment's just compensation provision is "designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S. 40, 49 (1960). (1) Public projects have to be paid for with public funds. (2) Shifting the costs of a public project from the public to private individuals is a taking of a property right that is cognizable under the Fifth Amendment. The government is building the Interchange on the backs of Petitioners and other similarly situated stakeholders without adequate mitigation, and as a result, their environmental and real property rights are rendered intrinsically and extrinsically less valuable. .

**Environment is a cognizable property right for purposes of the Fifth Amendment.**

Environment is certainly a cognizable property right. Newer forms of "ownership" of "intangible rights" can also comprise the "bundle of sticks" to be protected from a taking. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 433 (1982).[2].

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[2] Many newer intangible rights that did not exist at common law are far more elusive than the concept of environmental property rights; e.g. spectrum rights and auctioning thereof; rights to reactive power service on a

Environment is a real right, a fixed appurtenance, not portable. The environment is not one indivisible property right; its several types of embedded rights run the entire gamut from those wholly unique and not readily replaceable to those replicated as a commodity. On the one hand the FHWA liquidates highway noise pollution damages in its Policy Guides pursuant to 23 USC 109(i) and 23 CFR 772 in recognition of (a) the existence of a property right to be free from noise nuisance, and (b) the difficult to quantify character of that right. On the other hand weather derivatives and rights to pollute air (from stationary sources) are currently traded in both primary regulated exchanges and over the counter secondary markets, and the EPA is studying such programs for highway vehicular emitters. The South Coast Air Quality Mgmt Dist awards "offset rights" to those with worthy track records of emitting, but new emitters must buy "property rights" from old ones.

**The FHWA recognizes the concept of inverse condemnation and separate legal actions.**

The FHWA recognizes the concept of inverse condemnation resulting from cost shifting by highway users to adjacent stakeholders and further the possibility of inverse condemnation suits brought against it separate from NEPA regulations and the APA. See 49 CFR 24.107(c) which provides for attorney's fees in an "inverse condemnation proceeding." resulting from the regulatory

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transmission grid and consumption taxes thereon; and ownership of air space in a multi-story condominium.

condemnation action. Although not subject to this Fifth Amendment claim, State Respondent TxDOT regularly brings condemnation proceedings for FAHA projects in state courts, and parties regularly counterclaim for inverse condemnation.

Further, the concept of inverse condemnation resulting from noise, without physical invasion, is expressly recognized by the FHWA: in its own regulations under the name "substantial impairment" or by its older name "constructive use," 23 C.F.R. § 771.135(p) arising under a 4(f) analysis. The term "use" is to be construed broadly, not limited only to a physical taking, but also including areas that are adversely affected by the project. *Adler v. Lewis*, 675 F.2d 1085, 1092 (9th Cir. 1982).

**Petitioners' substantive Fifth Amendment takings claim is not preempted by the APA and certainly not by the procedural NEPA provisions as indicated in the district court's quoted language above.**

**While arguably there may be preemption of the constitutional claim by the 23 USC 109(i) regime, the court must actually apply that regime before preempting the constitutional claim.**

Petitioners deny that merely because the facts asserted for both the APA and direct constitutional claim are the same, that the APA claims preempt the constitutional claim without an express manifestation of Congressional intent. See *United States v. Clarke*, 445 U.S. 253, 257 (1980), which held that a landowner subject to BIA regulations

may bring an action in inverse condemnation as a result of "the self-executing character of the constitutional provision with respect to compensation ... "

The district court made its decision to dismiss the Fifth Amendment claim under the lens of NEPA. Petitioners see nothing in the procedural provisions of either the APA or the procedural provisions of NEPA that is such a pervasive scheme as to preempt noise nuisance suits in either federal or state courts. (*Compare City of Burbank v. Lockheed Air Terminal*, 411 U.S. 624, 626-640 (1973), wherein it was decided that in light of the pervasive nature of the scheme of federal regulation of aircraft noise, as reaffirmed and reinforced by the Noise Control Act of 1972, the Federal Aviation Administration... has full control over aircraft noise, pre-empting state and local control.)

By adoption of the longstanding mandatory language of 23 USC 109(i), Congress clearly saw traffic noise as the biggest impact on nearby stakeholders, but there is no language in that statute that Petitioners can discern that expressly preempts a direct constitutional challenge. Because of the nature and physics of noise, it is clear that the statutory relief and related regulatory and policy regime is a much more efficient and fair remedy for all concerned, but if the courts won't apply the 23 USC 109(i) federal remedy, then stakeholders should be allowed resort to their common law remedies.

**Question 3**

**A clear and express provision in the major federal transportation appropriations**

**legislation TEA-21, Sec 1309 subsections (f) and (g) respectively defining a "state agency" as a "federal agency" as to the implementation of Environmental Streamlining and expressly providing for judicial review, creates a limited jurisdictional right to hold a state highway agency accountable as to certain FAHA claims brought through the APA that would not otherwise exist and is not extinguished or ousted by its repeal and replacement with similar legislation.**

**The underlying question directly implicates state sovereign immunity. Although this Court has ruled on ouster among the various federal courts, to date it has not addressed the issue of ouster with respect to state jurisdiction. Because most appropriations legislation is temporal, and because more and more responsibility is being delegated to state highway agencies, particularly for Categorical Exclusions, this is a jurisdictional issue of great importance.**

A "23 USC 109 note" (sic) set forth TEA-21 appropriations legislation, Sec. 1309 "Environmental Streamlining" in its entirety, including subsections (f) and (g) which provided for judicial review and expressly defined a "state agency" to be a "federal agency" for purposes of carrying out streamlining responsibilities.

The Transportation Equity Act for the 21st Century (112 Stat 232, Public Law 105-178) (June 9, 1998) SEC. 1309 Environmental Streamlining [set forth in entirety as Note to 23 USC 109] subsections (f),(g) provided in pertinent part as follows:

"(f) Judicial Review and Savings Clause.--
(1) Judicial review.--Nothing in this section shall affect the reviewability of any final Federal agency action in a district court of the United States or in the court of any State....
"(g) Federal Agency Defined.--In this section, the term ``Federal agency'' means any Federal agency or any State agency carrying out affected responsibilities required by operation of Federal law". (*emphasis added*)

This language was in effect when this action was commenced in June 2004 and which named the Texas Transportation Commission as the governing arm of the Texas Department of Transportation (TxDOT) Defendant as to FAHA claims brought under the APA[3]

Petitioners asserted that Sec. 1309 Environmental Streamlining provisions subsections

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[3] Petitioners had brought other claims against TxDOT in the federal proceeding including a FOIA claim to force it to release the input assumptions used to calculate its several noise analyses, as well as a direct constitutional claim made for violation of Article I Sec 17 which prohibits a taking or damage of property without just compensation brought under the court's supplemental jurisdiction. The district court dismissed the FOIA claim at the first of only two scheduling conferences, and Petitioners withdrew the constitutional claim prior to the second after more carefully reviewing this Court's recent sovereign immunity decisions involving administrative agencies.

(f) and (g) of the TEA-21 appropriations bill conferred limited jurisdiction over the State Defendants as to Plaintiffs' APA/FAHA claims.

In August 2005 Congress passed the omnibus transportation appropriations bill SAFETEA-LU. The provisions of that bill included were codified in part in the Title 23 FAHA provisions. The new Title 23 provisions expressly note in an endnote that the Sec 1309 Environmental Streamlining provisions were "repealed." The 1309 subsections under which Petitioners claimed jurisdiction over the state administrative agency were replaced by SAFETEA-LU Sections 6001 et seq, and in particular, Sections 6002 (codified as 23 USC § 136 and regarding categorical exclusions) and 6004. These sections do not contain an express provision that a "state agency" is defined to be a "federal agency"; however, 6002(b), as discussed below, explicitly provides that the provisions of 6001 *et seq* are not retroactive.

Upon reconsideration, rather than addressing the constitutionality of the 1309 provision, the lower court held that the provision had been "repealed" and dismissed the State Defendants from judicial review of the Petitioners' FAHA claims.

> "This court denies the motion to reconsider its earlier conclusion that the plaintiffs cannot sue the State Defendants under the ISTEA (sic). Plaintiffs cite section 1309 of ISTEA to support their argument. Section 1309 does not provide a private cause of action against the State Defendants. Instead, section 1309 addresses state highway commissions, such as TXDOT,

> in relation to certain federally-funded highway projects that receive streamlined approval procedures. The IH-6 10 Rehabilitation Project and the IH-6 10 interchange with IH10 at issue in this case are not covered by section 1309. And, as defendants pointed out in their response to plaintiffs' motion to reconsider, Congress repealed this section of the ISTEA when it passed section 6002(1)(d) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act; A Legacy for Users (SAFETEA-LU), Pub. Law No. 109-59 (August 10, 2005). The motion to reconsider on the basis that ISTEA provides the plaintiffs a basis for suing the State Defendants is denied." District Court's Memorandum and Order, dated 3/15/06, App.B-23.

Although the Respondents made an Eleventh Amendment claim of sovereign immunity, neither they nor the court addressed directly the constitutionality of the 1309 statutory provision.

By affirming the lower court's dismissal of the State Defendants from judicial review of the Plaintiffs' APA claims, the Panel decision is contrary to accepted maxims of statutory interpretation, and with decisions of the Supreme Court and this Circuit concerning ouster of jurisdiction when the ouster implicates substantive rights by creating (or extinguishing) jurisdiction rather than merely reallocating the claim from one court to another..

Section 1309 (f),(g) is no blanket sue or be sued or other general consent provision such as presented in Atascadero State Hospital v. Scanlon, 473 U.S. 234 (1985).

Congress clearly intended that Federal Aid Highways Act (FAHA), 23 U.S.C. could regulate a State's conduct. Many FAHA mandates, including mitigation costs of environmental impacts are in large part federally funded, although if environmental mitigation measures are ordered, there would be implications for the State's fisc. (The federal government may withhold the future flow of funds in order to pay the State's approximate 20% share of any ordered mitigation costs. Presumably though, the FHWA could make that withholding anyway, so Plaintiffs' impact on the State's fisc would be none or minimal.)

The Federal Defendants asserted the argument that the 1309 Environmental Streamlining provisions were inapplicable to the instant categorical exclusion project but did not submit legislative history or analysis[4].

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[4] Petitioners had examined the legislative history, and assert this is untenable: 1309 was replaced in part with SAFETEA-LU Sec 6002 which was codified as 23 USC § 136 "State assumption of responsibility for categorical exclusions." Further, Plaintiffs submitted to the lower court the 2004 "Programmatic Categorical Exclusion Agreement" (USCA5—632—646) designed to streamline environmental requirements, but noted that they did not have in their possession the agreement, if any, that was in place in 2001 when the CE was granted for the highway project.

**1 USC § 109, the replacing statute SAFETEA-LU Sec 6002(b), and this Court's decisions regarding ouster indicate that the lower court's ruling should be reversed**

Plaintiffs assert the following two statutes, taken together, are sufficient to overcome a finding of ouster in this instance, and that is buttressed by this Court's analysis regarding ouster of jurisdiction.

1 USC § 109 "Repeal of statutes as affecting existing liabilities" states in pertinent part:

> "The repeal of any statute shall not have the effect to release or extinguish any ...liability incurred under such statute, unless the repealing Act shall so expressly provide...The expiration of a temporary statute shall not have the effect to release or extinguish any...liability incurred under such statute, unless the temporary statute shall so expressly provide..." (emphasis added)

SAFETEA-LU Sec 6002(b) itself expressly disclaims retroactivity:

> "Nothing in this section affects any existing State environmental review process, program, agreement, or funding arrangement approved by the Secretary under section 1309 ...as such section was in effect on the day preceding the date of enactment of the SAFETEA-LU."

SECTIONS 6001 ET SEQ, SAFE, ACOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS "SAFETEA-LU" (119 STAT 1144, PUBLIC LAW 109-59 (AUGUST 10, 2005) PROVISIONS, HEREAFTER SAFETEA-LU), App.D-6-8.

**Case law regarding ouster of jurisdiction**

Petitioners had cited *INS v St. Cyr*, 121 S. Ct. 2271 (2001) in their brief as providing a more recent analysis of legal support for the presumption against retroactivity for jurisdictional statutes implicating federal substantive rights, although *St. Cyr* and *Hughes, infra*, both involved federal jurisdictional ouster issues and do not involve state sovereignty. A discussion of two earlier cases, *Landgraf v. USI Film Products*, 114 S.Ct. 1483 (1994), a Title VII case brought forward from the Fifth Circuit, and *Hughes Aircraft Co. v. U.S. Ex Rel Schumer*, 117 S.Ct. 1871 (1997), also address the analysis with respect to changes in jurisdiction implicating substantive rights with *Hughes* being more on point.

*Hughes, supra*, presented to this Court a *qui tam* suit and a 1986 amendment. The unanimous Supreme Court held that the amendment created jurisdiction where none previously existed (*Hughes*, at 1877); the amendment was, therefore, subject to the presumption against retroactivity. The *Hughes* Court noted that respondent had contended that the "amendment is jurisdictional, and, hence, that it is an exception to the general *Landgraf* presumption against retroactivity, *Hughes*, 1878. This Court

analyzed that the amendment [to the *qui tam* statutes]

> "does not merely allocate jurisdiction among forums. Rather it creates jurisdiction where none previously existed; it thus speaks not just to the power of a particular court but to the substantive rights of the parties as well. Such a statute, even though phrased in 'jurisdictional' terms, is as much subject to our presumption against retroactivity as any other." *Hughes, id.* (emphasis added)

Plaintiffs could find no cases at the Supreme Court or Circuit Court level involving the specific issue ouster of jurisdiction over states, although this situation will presumably arise in cases involving state highway agencies who elect for temporary periods under the SAFETEA-LU Section 6004 (codified as 23 USC § 136) to be exclusively accountable for categorical exclusions.

## CONCLUSION

There are important constitutional, statutory, and policy reasons for this Court to resolve the questions presented herein, and Petitioners ask the Court to resolve these questions in this instant case. We therefore submit that this petition for writ of certiorari should be granted.

Respectfully submitted,

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April 17, 2008

No. _____

# In The Supreme Court of the United States

WILLIAM ALLAN WARE, ET AL.,
*Petitioners,*

v.

FEDERAL HIGHWAY ADMINISTRATION, ET AL.,
*Respondents.*

On Petition for Writ of Certiorari to the United States Court of Appeals for the Fifth Circuit

## APPENDIX

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# APPENDICES

## Appendix A

**Fifth Circuit Court of Appeals**
PER CURIAM Opinion ..... **A - 1**
(see also App C Denial of Rehearing)

## Appendix B

**District Court Opinions** ..... **B - 1**
MEMORANDUM AND ORDER GRANTING IN PART and DENYING IN PART Defendants'. MOTION to Dismiss. (Entered: 9/30/2005) ..... **B - 1**

MEMORANDUM AND OPINION entered DENYING MOTION for Preliminary Injunction, MOOTING MOTION to Dismiss, GRANTING MOTION for Summary Judgment, DENYING MOTION for Reconsideration of Memorandum & Order, and DENYING Amended MOTION for Reconsideration of Memorandum & Order. (Entered: 3/15/2006) ..... **B - 15**

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# APPENDIX A

# IN THE UNITED STATES COURT OF APPEALS FOR THE FIFTH CIRCUIT

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No. 06-20637

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[United States Court of Appeals
Fifth Circuit; Argued September 4, 2007,
F I L E D November 20, 2007
Charles R. Fulbruge III, Clerk;
(Argued September 4, 2007)

WILLIAM WARE; CAROL CAUL
Plaintiffs - Appellants

v.

UNITED STATES FEDERAL HIGHWAY ADMINISTRATION; CURTIS DAN REAGAN, In His Official Capacity as Division Administrator of the Federal Highway Administration Texas Division; J. RICHARD CAPKA, In His Official Capacity as Administrator of the Federal Highway Administration; UNITED STATES DEPARTMENT OF TRANSPORTATION; MARY E. PETERS, In Her Official Capacity as Secretary of Transportation of the United States Department of Transportation; TEXAS TRANSPORTATION COMMISSION; RICHARD F. WILLIAMSON, In His Official Capacity as Chair Texas Transportation Commission
Defendants - Appellees

Appeal from the United States District Court
for the Southern District of Texas
4:04-CV-2295

Before KING, GARZA, and BENAVIDES, Circuit Judges.

PER CURIAM :*

William Ware and Carol Caul ("Appellants"), appeal the district court's dismissal, for failure to state a claim, of their Fifth Amendment claim, as well as claims, brought under the Administrative Procedures Act ("APA") against the Texas Transportation Commission. Appellants also seek review of the district court's grant of summary judgment to the federal defendants on claims brought under the APA. Appellants's (sic) APA claim alleges violations of the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4370f, and the Federal Aid Highways Act ("FAHA"), 23 U.S.C. §§ 109 and 128. Appellants' claims stem from their dissatisfaction with the construction of a highway ramp for I H-610 near their neighborhood in Houston, specifically dissatisfaction with noise generated by the new ramp. Construction on the project is now complete.

* Pursuant to 5TH CIR. R. 47.5, the court has determined that this opinion should not be published and is not precedent except under the limited circumstances set forth in 5TH CIR. R. 47.5.4.

Prior to oral argument, we requested additional briefs from the parties regarding whether completion of the highway construction mooted the case. In analyzing mootness we ask whether the "requested relief would... ease or correct the alleged wrong." *Bayou Liberty Ass'n v. U.S. Army Corps of Engineers*, 217 F.3d 393, 397 (5th Cir. 2000). The wrong, according to Appellants, is a failed noise analysis resulting in an excessively noisy highway. Appellants requested relief from the district court in the form of a preliminary injunction to stop construction and to have a new noise analysis done.[1]

Appellees point to a series of NEPA cases where we have found completion of construction to moot an action. See, e.g., *Bayou Liberty*, 217 F.3d at 396 (mooting action which sought to enjoin construction, and sought declaratory relief that permit approval process was arbitrary and capricious); *Richland Park Homeowners Ass'n, Inc. v. Pierce*, 671 F.2d 935,945 (5th Cir. 1982) (mooting case to the extent it asked court to set aside preconstruction approval process for housing development); *Save the Bay, Inc. v. U.S. Army*, 639 F.2d 1100,1102 (5th Cir. 1981) (mooting case which sought to enjoin railroad construction). These cases recognize that "the basic thrust of NEPA is to provide assistance for evaluating proposals or prospective federal action in light of their future effect upon environment factors, not to serve as a

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[1] Appellants asked the district court to require a new noise analysis conducted under court supervision, with appellants' participation. The district court properly noted that it could, at most, remand to the agencies for further proceedings.

basis for after-the-fact critical evaluation subsequent to substantial completion of construction." *Richland Park*, 671 F.2d at 940. However, the appellants seek injunctive relief for violations of the FAHA which distinguishes this case from our NEPA-focused precedent.

We often note that NEPA guarantees a process, not a particular result. See *Gulf Restoration Network v. U.S. Dept. of Transp.*, 452 F.3d 362, 367 (5th Cir. 2006). NEPA's pre-construction process offers little to a plaintiff after completion of construction. While their goals overlap to a degree, in contrast to NEPA, the FAHA does to a certain extent require a particular result. The FAHA states that the FHWA "shall not approve plans or specifications for any proposed project.... unless [the agency] determines that such plans and specifications include adequate measures to implement the appropriate noise level standards." 23 U.S.C. § 109(i). FAHA regulations provide detail to § 109(i)'s "noise level standards." See 23 C.F.R. Part 772. Prior to FHWA approval, the FAHA regulations require a noise analysis conducted pursuant to specified FHWA methods, along with the adoption of reasonable and feasible measures to mitigate highway noise based on the analysis. See 23 C.F.R. §772.17 (providing FHWA-approved methods); 23 C.F.R. § 772.11 (requiring adoption of reasonable and feasible mitigation measures).

Despite the fact that construction is complete, appellants ultimately seek relief from noise brought on by the highway. Assuming the prior noise analyses were deficient, completion of construction does not undermine the benefits of further noise

mitigation measures (e.g., noise barrier walls) that could be added based on a new, FAHA-compliant noise analysis. See *Vieux Carre Prop. Owners, Residents, and Assoc., Inc. v. Brown*, 948 F.2d 1436, 1446-47 (5th Cir. 1991) (finding that, despite near completion of construction, meaningful relief could be granted based on new agency review, where agency had not previously carried out review required by the National Historic Preservation Act). Therefore, the appellants' case is not moot.

Although their case is not moot, the Appellants do not present meritorious grounds for appeal. As to the merits of Appellants' case, we AFFIRM the judgment of the district court, entered May 30, 2006, for essentially the reasons given in its Memorandum and Order dated September 30, 2005, and its Memorandum and Opinion dated March 15, 2006.

# APPENDIX B

MEMORANDUM AND ORDER entered GRANTING IN PART and DENYING IN PART Defts. [41] MOTION to Dismiss. The state defendants are dismissed from this case. ( Signed by Judge Lee H Rosenthal ) Modified on 9/30/2005 (Entered: 9/30/2005)

**IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION**

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**CIVIL ACTION NO. H-04-2295**
[Docket Entry 64; filed 09/30/05
USCA5-2163-2775]

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WILLIAM WARE and CAROL CAUL,
Plaintiffs,

VS.

UNITED STATES FEDERAL HIGHWAY ADMINISTRATION, et al.,
Defendants.

## MEMORANDUM AND ORDER

Plaintiffs William Ware and Carol Caul, residents of Houston, Texas, have filed this *pro se* suit against the following entities and individuals:

(1) the United States Federal Highway Administration (FHWA); (2) Curtis Dan Reagan, Division Administrator of the FHWA, Texas Division, in his official capacity; (3) Mary E. Peters, Administrator of the FHWA, in her official capacity; (4) the United States Department of Transportation (DOT); (5) Norman Y. Mineta, Secretary of the DOT, in his official capacity;[1] (6) the Texas Transportation Commission; and (7) Richard F. Williamson, Chair of the Texas Transportation Commission, in his official capacity;[2] alleging, *inter alia*, violations of the Federal Aid Highways Act, 23 U.S.C. § § 109 and 128 (FAHA); the National Environmental Policy Act, 42 U.S.C. § 4321 et seq. (NEPA); and the Civil Rights Act, 42 U.S.C. § 1983. (Docket Entry Nos. 1, 37). Defendants have filed a motion to dismiss all claims. (Docket Entry No. 41). Plaintiffs have replied. (Docket Entry Nos. 51, 60). Defendants have filed a supplement to the motion to dismiss, alternatively requesting summary judgment in their favor on the NEPA claims, which arise under the Administrative Procedures Act, 5 U.S.C. § 552 *et seq*. (APA). (Docket Entry No. 48). After reviewing the motions, pleadings, record, and applicable law, the court grants in part and denies in part the motion to dismiss for the reasons explained below. The motion for summary judgment will be separately addressed after plaintiffs respond.

## I. Background Facts

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[1] The first five defendants are collectively referred to as the "Federal Defendants."

[2] The final two defendants are collectively referred to as the "State Defendants."

This lawsuit stems from an ongoing highway construction project in the city of Houston. The project involves a seven-mile stretch of highway; the specific location at issue is the intersection of Interstate Highway 610 West Loop with Interstate 10. Plaintiffs live in a neighborhood near North Post Oak Road, close to the intersection. Construction on the project began in 1999. The parties dispute the nature, number, and extent of the meetings, disclosures, and procedures followed before construction began.

The project includes a new exit ramp from IH 610 to the frontage road near Woodway Street. This ramp, which extends seventy-three feet into the air to comply with federal and state standards, impairs plaintiffs' view of nearby Memorial Park. Plaintiffs alleged that the new ramp will significantly impact their neighborhood, increasing traffic, noise, and pollution well beyond the levels projected by the defendants when the project received initial approval. Although noise barriers have been installed near plaintiffs' home, plaintiffs contend that these barriers are insufficient. More generally, plaintiffs allege that the project under construction is not the project for which defendants obtained approval. Plaintiffs argue that defendants have hidden relevant information from plaintiffs and the public as part of a wide-ranging conspiracy to punish plaintiffs (and plaintiffs' neighborhood) for challenging previous state highway construction projects. Defendants note that the project was nearly forty-five percent complete when plaintiffs first filed this suit. Defendants have moved to dismiss all plaintiffs' claims, invoking Federal Rules of Civil Procedure 12(b)(1) and 1 2(b)(6).

## II. The Legal Standards

Federal Rule of Civil Procedure 12(b)(1) governs challenges to a court's subject matter jurisdiction. "A case is properly dismissed for lack of subject matter jurisdiction when the court lacks the statutory or constitutional power to adjudicate the case." *Home Builders Ass'n of Miss., Inc. v. City of Madison*, 143 F.3d 1006, 1010 (5th Cir. 1998) (quoting *Nowak v. Ironworkers Local 6 Pension Fund*, 81 F.3d 1182, 1187 (2d Cir. 1996)). "Courts may dismiss for lack of subject matter jurisdiction on any one of three bases: (1) the complaint alone; (2) the complaint supplemented by undisputed facts in the record; or (3) the complaint supplemented by undisputed facts plus the court's resolution of disputed facts." *Clark v. Tarrant County*, 798 F.2d 736, 741 (5th Cir. 1986) (citing *Williamson v. Tucker*, 645 F.2d 404, 413 (5th Cir. 1981)). The plaintiff bears the burden of demonstrating that subject matter jurisdiction exists. See *Paterson v. Weinberger*, 644 F.2d 521, 523 (5th Cir. 1981). In examining a factual challenge to subject matter jurisdiction under Rule 12(b)(1), which does not implicate the merits of plaintiff's cause of action, the district court has substantial authority "to weigh the evidence and satisfy itself as to the existence of its power to hear the case." *Garcia v. Copenhaver, Bell & Assocs.*, 104 F.3d 1256, 1261 (11th Cir. 1997); see also *Clark*, 798 F.2d at 741. The court may consider matters outside the pleadings, such as testimony and affidavits. See *Garcia*, 104 F.3d at 1261.

A motion to dismiss under Rule 12(b)(6) "is viewed with disfavor and is rarely granted." *Kaiser Aluminum & Chem. Sales v. Avondale Shipyards*,

677 F.2d 1045, 1050 (5th Cir. 1982). The complaint must be liberally construed in favor of the plaintiff, and all facts pleaded in the complaint must be taken as true. *Campbell v. Wells Fargo Bank*, 781 F.2d 440, 442 (5th Cir. 1986). The district court may not dismiss a complaint under Rule 1 2(b)(6) "unless it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." *Conley v. Gibson*, 355 U.S. 41, 45-46 (1957). This strict standard of review under Rule 12(b)(6) has been summarized as follows: "The question therefore is whether in the light most favorable to the plaintiff and with every doubt resolved in his behalf, the complaint states any valid claim for relief." 5 Charles A. Wright & Arthur R. Miller, FEDERAL PRACTICE AND PROCEDURE 1357, at 601 (1969); *Lowrey v. Texas A&M Univ. Sys.*, 117 F.3d 242, 247 (5th Cir. 1997). "In order to avoid dismissal for failure to state a claim, however, a plaintiff must plead specific facts, not mere conclusory allegations. We will thus not accept as true conclusory allegations or unwarranted deductions of fact." *Tuchman v. DSC Comm 'ns Corp.*, 14 F.3d 1061, 1067 (5th Cir. 1994) (internal citations, quotation marks and ellipses omitted). If an affirmative defense or other barred relief (such as absolute immunity or statute of limitations) is apparent from the face of the complaint, a motion under Rule 12(b)(6) should be granted. 5B Charles A. Wright & Arthur R. Miller, FEDERAL PRACTICE & PROCEDURE Civil 3d § 1357, at 708 (2004).

In considering a motion to dismiss for failure to state a claim, a district court must limit itself to the contents of the pleadings, including attachments. FED. R. CIV. P. 12(b)(6). Various circuits have

specifically allowed that "[d]ocuments that a defendant attaches to a motion to dismiss are considered part of the pleadings if they are referred to in the plaintiff's complaint and are central to her claim." *Venture Assocs. Corp. v. Zenith Data Sys. Corp.*, 987 F.2d 429, 431 (7th Cir. 1993); *see also Field v. Trump*, 850 F.2d 938, 949 (2d Cir. 1998); *Branch v. Tunnell*, 14 F.3d 449, 453-54 (9th Cir. 1994); *Sheppard v. Texas Dep 't of Transp.*, 158 F.R.D. 592, 595 (E.D. Tex. 1994). By attaching such materials, the defendant assists the plaintiff in establishing the basis of the suit and the court in making the elementary determination of whether a claim has been stated. The Fifth Circuit has approved of this practice. *Collins v. Morgan Stanley Dean Witter*, 224 F.3d 496 (5th Cir. 2000).

**III. The Issue of Standing**

Defendants contend that plaintiffs lack standing to pursue their claims. Standing is a jurisdictional requirement. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-56 1 (1992). "[T]he irreducible constitutional minimum of standing contains three elements. First, the plaintiff must have suffered an 'injury in fact'--an invasion of a legally protected interest that is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical. Second, there must be a causal connection between the injury and the conduct complained of . . . . Third, it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision." *Walker v. City of Mesquite*, 169 F.3d 973, 978-79 (5th Cir. 1999) (quoting *Lujan*, 504 U.S. at 560-56 1) (footnote, citations, and internal quotation marks omitted)). In

an APA suit, a plaintiff must establish not only constitutional standing, but also statutory standing to obtain judicial review of agency action. Statutory standing requires that: (1) the challenged agency action has caused the plaintiff an injury in fact, and (2) the alleged injury is within the "zone of interests" to be protected by the statutes the agencies have allegedly violated. *Sierra Club v. Morton*, 405 U.S. 727, 733 (1972); *Ass 'n of Data Processing Serv. Orgs., Inc. v. Camp*, 397 U.S. 150 (1970); *Barlow v. Collins*, 397 U.S. 159 (1970).

Plaintiffs allege injury to themselves, their property, and their "way of life" by defendants' actions. Plaintiffs live in a neighborhood abutting the project. They allege specific harms, including loud noise, pollution, a reduction in property values, an increase in risks to personal health, and aesthetic harms. The ongoing construction project is the alleged cause of these injuries. The relief plaintiffs seek — stopping the project — will provide redress. Plaintiffs also seek redress under laws designed to regulate the conduct of government decisionmakers in the challenged project. *Cf. Ctr. for Auto Safety v. Tiemann*, 414 F. Supp. 215, page (D.D.C. 1976) (finding that safety organization's interest in FAHA compliance fell within the "zone of interests" protected by the act). The motion to dismiss for lack of standing is denied.

## IV. The Issue of Improper Pleading

Defendants argue that plaintiffs' case should be dismissed for repeated failure to comply with the pleading requirements of the Federal Rules of Civil Procedure, specifically the Rule 8 notice pleading

standard. Plaintiffs have, despite repeated opportunities, failed to submit a statement of their claims that is either short or plain. Although a court may grant a motion to dismiss if a plaintiff fails to comply with the Federal Rules of Civil Procedure, *Havens Realty Corp. v. Coleman*, 455 U.S. 363, 383 (1982) (Powell, J., concurring), this court declines to do so at this juncture and instead will examine the more substantive flaws in the claims alleged.

## V. The Challenges to the Federal Highway Act and NEPA Claims

Plaintiffs allege that all defendants violated provisions of the Federal Aid Highway Act, 23 U.S.C. §§ 109 and 128. The Act imposes certain requirements before a state may receive federal highway funds. (Docket Entry No. 37,¶¶ 118, 127, 130). Plaintiffs also allege numerous violations of the National Environmental Policy Act, 42 U.S.C. § 4321 et seq. (Docket Entry No. 37 ¶¶ 120, 130). Defendants move to dismiss on the ground that none of these laws creates a private right of action.

Numerous courts, including the Fifth Circuit, have considered whether these provisions, including amendments to the FAHA by the Intermodal Surface Transportation Efficiency Act (ISTEA), imply private rights of action. All of these courts have answered this question in the negative. *See Allandale Neighborhood Ass 'n v. Austin Transp. Study Policy Advisory Comm.*, 840 F.2d 258, 265 (5th Cir. 1988) (neither 23 U.S.C. § 109 nor the FAHA amendments in the ISTEA create a private right of action); *Noe v. Metro. Atlanta Rapid Transit Auth.*, 664 F.2d 434, 436-39 (5th Cir. 1981) (no private right of action

exists under NEPA); *Jersey Heights Neighborhood Ass 'n v. Gendening*, 174 F.3d 180, 186 (4th Cir. 1999) ("Since neither FAHA nor NEPA itself provide a private right of action, all of these claims lie under the Administrative Procedure Act (APA), 5 U.S.C. § 551 *et seq.*") (additional citations omitted); *Sierra Club v. Slater*, 120 F.3d 623 (6th Cir. 1997); *see also Buckingham Twp. v. Wykle*, 157 F. Supp. 2d 457, 465 (E.D. Pa. 2001) (collecting and citing numerous cases in support of both propositions).

To the extent plaintiffs attempt to sue defendants directly under these laws, those claims are dismissed. Plaintiffs have also invoked the Administrative Procedures Act, which requires a separate analysis. (Docket Entry No. 37 ¶ 137).

**VII. The Challenge to the APA Claim**

The State Defendants contend that review under the APA is available only against federal agencies. All defendants argue that their actions were neither arbitrary nor capricious; that plaintiffs have failed to overcome the presumption that agency action is legal; and that the doctrine of laches bars plaintiffs' claims.

The APA defines the term "agency" as "each authority of the Government of the United States, whether or not it is within or subject to review by another agency. . . ." 5 U.S.C. § 701(b)(1). Recognizing this explicit limit on the scope of the APA to federal governmental agencies, the Fifth Circuit has noted that the APA is "a route through which private plaintiffs can obtain federal court review of the decisions of *federal* agencies." *Resident*

*Council of Allen Parkway Vill. v. United States Dep't of Hous. & Urban Dev.*, 980 F.2d 1043, 1055 (5th Cir. 1993) (quoting *Vieux Carre Property Owners, Residents & Assocs., Inc. v. Brown*, 875 F.2d 453, 456 (5th Cir. 1989) (emphasis added)). The State Defendants' motion to dismiss plaintiffs' claims under the APA is granted.

Defendants' remaining arguments go to the merits of the APA claim. Defendants do not argue that this court lacks jurisdiction over this claim or that plaintiffs have failed to state a claim for which relief can be granted. Determining whether defendants actions were arbitrary and capricious, so as to overcome the presumption of legality of agency action, and whether laches bars plaintiffs' suit, cannot rest on the pleadings alone. The Federal Defendants' motion to dismiss the claims arising under the APA is denied; the arguments raised in the motion to dismiss will be addressed on the basis of the summary judgment motion, response, and record.

## VIII. The Section 1983 Claims

### A. The Claims Against State Defendants

Plaintiffs allege claims against the State Defendants under 42 U.S.C. § 1983 for violations of plaintiffs' substantive due process rights under the United States Constitution and the Texas Constitution.[3] (Docket Entry No. 37 ¶145). In

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[3] In their reply, plaintiffs for the first time invoke the "takings" clause of the Fifth Amendment to the United States Constitution. Plaintiffs have not alleged a violation of their

plaintiffs' response to the motion to dismiss, plaintiffs concede that the Eleventh Amendment precludes the section 1983 claims against the State Defendants, (Docket Entry No. 51 ¶27), but resurrect those claims in their supplemental reply. (Docket Entry No. 60 at 14-15).

The Eleventh Amendment bars federal court actions against a state or an agency of the state unless the state consents or Congress has validly abrogated the state's Eleventh Amendment immunity. *College Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd.*, 527 U.S. 666, 670 (1999); *Pennhurst State Sch. & Hosp. v. Halderman*, 465 U.S. 89, 100 (1984). State governments and their agencies are not "persons" under section 1983 and cannot be sued in federal court absent consent. *Quern v. Jordan*, 440 U.S. 332 (1979); *Cronen v. Tex. Dep 't of Human Sers.*, 977 F.2d 934, 936 (5th Cir. 1992); *see also Robinson v. Georgia Dep 't of Transp.*, 966 F.2d 637, 640 (11th Cir. 1992) (holding that Congress did not abrogate the states' Eleventh Amendment immunity in enacting section 1983). Because Texas has not consented to suit under section 1983, plaintiffs' section 1983 claims against the Texas Transportation Commission are dismissed.

The Eleventh Amendment prevents awarding retroactive relief if the damages will be paid from the state treasury. *Edelman v. Jordan*, 415 U.S. 651,

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Fifth Amendment rights in the complaint or amended complaint and have not moved for leave to amend to assert it.

678 (1974). However, an individual may sue a state officer, even in his official capacity, for prospective injunctive relief. *Hafer v. Melo*, 502 U.S. 21, 25 (1991); *Will v. Michigan Dep 't of State Police*, 491 U.S. 58, 71 n.10 (1989); *Ex Parte Young*, 209 U.S. 123, 159-60 (1908). Such prospective relief may be awarded even if compliance will cost the state money in the future. See, e.g., *Graham v. Richardson*, 403 U.S. 365 (1974). Federal courts are only permitted to enjoin state officers from violating federal, not state, law. *Pennhurst*, 465 U.S. at 121.

*Pennhurst* requires dismissal of plaintiffs' claims to the extent they seek a declaration against defendants based on alleged violations of the Texas constitution. Additionally, this court dismisses plaintiffs' claims to the extent they seek monetary damages from the State of Texas. The claims for money damages against all State Defendants are dismissed. Plaintiffs' amended complaint also requests "restitution [sic] in the form of an injunction of construction of the current design and declaratory relief ordering the development of an alternate less damaging design for the road. . . . " (Docket Entry No. 37 ¶160). This request for prospective injunctive relief against State Defendant Richard F. Williamson, in his official capacity, must be dismissed, but not because it is barred under the Eleventh Amendment.

Plaintiffs nonetheless fail to allege a viable cause of action against Williams. Plaintiffs' section 1983 claim, although presented as an independent cause of action, is dependent on plaintiffs' general complaints about all defendants' conduct in approving the highway project and proceeding with

the construction. None of the federal law plaintiffs invoke provides for a private cause of action. The Supreme Court has held, and the Fifth Circuit has often reiterated, that "§ 1983 will not provide a cause of action for a violation of a federal statute where the federal statute in question does not 'create enforceable rights, privileges, or immunities within the meaning of § 1983.'" *Resident Council of Allen Parkway Vill.*, 980 F.2d at 1051 (quoting *Wright v. City of Roanoke Redev. & Hous. Auth.*, 479 U.S. 418, 423 (1987)). In addition, to permit a section 1983 claim to proceed against Williamson, a state official, would undermine the APA's prohibition of federal court review of state action. *Cf. id.* at 1055.

The motion to dismiss the section 1983 claims is granted as to all the State Defendants.

**B. The Challenge to the Claims Against the FHWA**

Plaintiffs assert section 1983 claims against the FHWA. (Docket Entry No. 37 ¶145).[4] Section 1983 has no application to the federal government or its officers. See *Wheedlin v. Wheeler*, 373 U.S. 647, 650 & n.2 (1963). The FHWA's motion to dismiss is granted.

**IX. Conclusion**

Defendants' motion to dismiss the section 1983 claims is granted. Defendants' motion to

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[4] Plaintiffs have not sued any individual federal defendant under section 1983.

dismiss the FAHA and NEPA claims is granted insofar as those claims attempt to assert a private cause of action. The State Defendants' motion to dismiss the APA claims is granted, and the State Defendants are dismissed from the case. The Federal Defendants' motion to dismiss the FAHA and NEPA claims under the APA is denied; the arguments raised will be addressed in the rulings on defendants' motion for summary judgment.

SIGNED on September 30, 2005, at Houston, Texas.

/s/Lee H. Rosenthal
United States District Judge

MEMORANDUM AND OPINION entered
DENYING [Docket #59] MOTION for Preliminary Injunction, MOOTING [65] MOTION to Dismiss, GRANTING [65] MOTION for Summary Judgment, DENYING [67] MOTION for Reconsideration of [64] Memorandum & Order, and
DENYING [68] Amended MOTION for Reconsideration of [64] Memorandum & Order.
( Signed by Judge Lee H Rosenthal )
(Entered: 3/15/2006)

**IN THE UNITED STATES DISTRICT COURT**
**FOR THE SOUTHERN DISTRICT OF TEXAS**
**HOUSTON DIVISION**

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**CIVIL ACTION NO. H-04-2295**
[Docket Entry 77; filed 03/15/06
USCA5-2387--2443]

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WILLIAM WARE and CAROL CAUL,
Plaintiffs,

VS.

UNITED STATES FEDERAL HIGHWAY ADMINISTRATION, et al.,
Defendants

**MEMORANDUM AND OPINION**

Plaintiffs William Ware and Carol Caul filed this pro se suit challenging a highway construction

project in Houston, Texas. The plaintiffs live near Interstate Highway 610 South Loop West (IH-6 10 West), close to where it intersects with Interstate Highway 10 (IH10). The section of IH-610 West near the plaintiffs' home was built in the 1960s; the plaintiffs moved into their residence in 1987. In 1991, state and federal officials concluded that because of the "severe traffic congestion" in the area, changes had to be made. After evaluations, reevaluations, and a bidding process, construction on this part of the IH-6 10 "Rehabilitation Project" began in June 2003. On June 15, 2004, the plaintiffs sued state and federal highway officials and agencies involved in reviewing and approving the project, alleging that the elevation of reconfigured lanes and connectors will greatly increase the noise heard in the nearby homes and parks and that the elevation of a new exit ramp is also a visual pollutant. (Docket Entry No. 1). The plaintiffs assert that the defendants violated statutory, regulatory, and constitutional requirements in reviewing and approving the highway project. The plaintiffs ask this court to issue a preliminary injunction requiring the defendants to perform a new noise analysis, subject to court supervision, and to stop the construction until the analysis is complete and new mitigation or other measures approved. In response, the defendants argue that the plaintiffs have no legal basis for their claims or for the relief they seek.

This court has carefully reviewed the pleadings, the motions and responses, the parties' submissions, and the applicable law. Based on this review, this court grants the defendants' motion for summary judgment, finding that the law does not allow the plaintiffs to proceed on the claims they

assert. As a result, the preliminary injunction must be denied. The reasons for these rulings are set out in detail below.

## I. Background

This summary is drawn from the administrative record and affidavits that the parties have submitted. Although the parties may dispute the way some events are described or characterized, none of these disputes is material to determining whether the plaintiffs' legal claims can proceed.

### A. The Parties and Claims

The plaintiffs, Carol Caul and William Ware, own a condominium near the area that is under construction IH-6 10 South Loop West, close to the intersection of IH- 10. IH-6 10 is part of what is called the "Loop," a freeway that circles the City of Houston and allows access to the interstates that run east-west and north-south as well as to other major highways. The West Loop is approximately 5.5 miles west of downtown and serves local and regional traffic in Houston and western Harris County. According to Ware's affidavit, the plaintiffs' front door is approximately 750 feet from the edge of the reconfigured IH-610 project. In his affidavit, Ware states that with the present highway configuration, they can "hear the highway roar of 610 and I-10 at [our] front door sidewalk." (Docket Entry No. 51, Ex. 31, ¶4). The record shows that the average daily traffic over this section of IH-610 increased over ninety percent between 1969 and 1989. As noted, the plaintiffs moved into their home in 1987.

Caul is a lawyer. Ware is a "self-employed instructor and consultant" who has "been involved in the energy industry." (Id. at ¶5). He has an undergraduate and master's degree in chemical engineering and a master's in business administration.

The plaintiffs sued: (1) the United States Federal Highway Administration (FHWA); (2) Curtis Dan Reagan, Division Administrator of the FHWA, Texas Division, in his official capacity; (3) Mary E. Peters, Administrator of the FHWA, in her official capacity; (4) the United States Department of Transportation (DOT); (5) Norman Y. Mineta, Secretary of the DOT, in his official capacity; (6) the Texas Transportation Commission; and (7) Richard F. Williamson, Chair of the Texas Transportation Commission, in his official capacity. The first five defendants are occasionally referred to as the "Federal Defendants" or the "FHWA"; the last two defendants are occasionally referred to as the "State Defendants" or "TXDOT." The plaintiffs alleged violations of the Federal Aid Highways Act, (FAHA), 23 U.S.C. §§ 109 and 128; the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq.; the Administrative Procedures Act, (APA), 5 U.S.C. § 706 et seq.; and the Civil Rights Act, 42 U.S.C. § 1983. (Docket Entry Nos. 1, 37).

In a previous Memorandum and Order, this court granted in part and denied in part motions to dismiss filed by some of the defendants. (Docket Entry No. 64). Specifically, this court denied the motion to dismiss the plaintiffs' claims for lack of standing; granted the motion to dismiss claims brought directly under the FAHA and NEPA because

the statutory section the plaintiffs invoked provide no private right of action; denied the motions to dismiss the APA claims; and granted the motions to dismiss the section 1983 claims. The following motions are addressed in this opinion: plaintiffs' motion for reconsideration, (Docket Entry Nos. 67, 68), to which defendants have responded, (Docket Entry Nos. 72, 73); plaintiffs' motion for preliminary injunction (Docket Entry No. 59), to which the defendants have responded, (Docket Entry No. 65); and defendants' renewed motion to dismiss and a motion for summary judgment, (Docket Entry No. 65), to which the plaintiffs have responded, (Docket Entry No. 70).

**B. The Issues**

Although the project extends along IH-610 West from IH-10 West to West Bellfort, approximately seven miles, the segment at issue is from south of Post Oak Boulevard to IH10, near and at the intersection of the two interstate highways. The record shows that TXDOT planned two separate highway construction projects, one along IH-610 and one along IH-10, but combined the work at the interchange of IH-610 and IH-10 for contracting purposes.

The project design changed from the original proposal. As approved by TXDOT and the FHWA in 2001, the project included an elevated exit ramp near the IH-610 West intersection with IH- 10 to reduce traffic weaving and to increase the vertical clearance for the traffic below the overpass to bring

the highway into compliance with modern standards. This ramp is approximately seventy feet above the ground at its highest point. The plaintiffs refer to the elevated ramp as "Godzilla-like" and decry its intrusive visual presence near their neighborhood on one side of the freeway and near a large park and arboretum on the other side. The plaintiffs allege that the new ramp did not need to be so high to meet the stated design objectives.

The project also added auxiliary lanes and connectors closer to the plaintiffs' neighborhood home than the antiweaving ramp. The plaintiffs allege that the elevation of these mainlanes and connectors will increase the level of noise they will experience beyond the level projected for, or addressed by, the project design. The plaintiffs contend that installed and contemplated noise barrier walls will lessen the noise only for the homes next to the walls but will not significantly reduce the noise for homes located further away. As noted, the plaintiffs' condominium is approximately 750 feet away from the reconfigured freeway.

In 1992, the FHWA approved the IH-610 project as a "Categorical Exclusion" (CE) under NEPA. This status meant that the project did not require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), which involve higher levels of NEPA documentation than a Categorical Exclusion. To approve a project as a Categorical Exclusion, the FHWA must find that the project does not involve significant environmental impacts, defined in 23 C.F.R. § 771.117(a). The plaintiffs allege that the project should not have been approved as a Categorical Exclusion and assert

that as a result, the project violates NEPA and the APA. In 2001, TXDOT issued a Reevaluation for the project, concluding that although the project plans had changed since 1992, Categorical Exclusion status remained appropriate and no additional environmental studies were necessary. Both the 1992 and 2001 Reevaluations included noise-impact studies. The FHWA relied on the 2001 Reevaluation in deciding to provide federal funds for the project.

In 2004, TXDOT notified the FHWA of a miscalculation in the earlier noise-impact studies done on the IH-610 Rehabilitation Project. (Docket Entry No. 41, App. B at 8). TXDOT submitted another reevaluation report that included a new noise analysis. That study, issued in July 2004, concluded that the noise level would be higher than originally projected, but with adequate noise-mitigation measures, would not cause a "significant environmental impact" under NEPA. The plaintiffs challenge this finding, again asserting that it violates NEPA and the APA.

The plaintiffs generally allege that the project under construction is not the project that the defendants disclosed to the public or submitted for approval. The plaintiffs argue that the defendants concealed relevant information, making the process by which they obtained approval deficient under the applicable statutes and regulations. The plaintiffs allege that the defendants concealed the elevations of the ramps and lanes and the projected noise impacts as part of a wide-ranging conspiracy to punish plaintiffs (and plaintiffs' neighborhood) for earlier challenges to highway construction projects. The plaintiffs also allege that a "more likely

conspiracy" existed to hide the projected "above standard noise levels of the . . . mainlanes and connectors . . . on the Plaintiffs' neighborhood including Memorial Park and how this came to be (and continues to be ignored by the federal and state agencies)." The plaintiffs allege that this case "involve[s] a trail of deception, misleading statements to federal judges, and the misconduct on the part of certain employees and the management of the Texas Department of Transportation that may ultimately have to be pursued by federal legal enforcement." (Docket Entry No. 68 at 5–6). The defendants note that the project was nearly forty-five percent complete when the plaintiffs first filed this suit; plaintiffs respond that the defendants concealed information that would have allowed suit to be filed earlier.

## II. The Plaintiffs' Motion for Reconsideration

Plaintiffs move for reconsideration of this court's previous Memorandum and Order addressing the defendants' motions to dismiss. The plaintiffs contend that this court improperly dismissed their claims against the State Defendants. The plaintiffs assert that the Transportation Equity Act for the 21st Century (ISTEA), 112 Stat. 232, Public Law 105-178 (1998), allows such lawsuits against state actors. Plaintiffs also request "clarification" of several issues. In this part of their motion, plaintiffs argue that this court's reference to the arbitrary and capricious standard of review, although not directly at issue in this court's previous Memorandum and Order, misstated the standard that should be applied to their NEPA and APA claims. Plaintiffs also seek clarification as to whether this court

determined that they lack standing to seek relief for "cumulative harms" allegedly caused by the defendants' conduct, and whether the Fifth Amendment "takings" claims survived the motions to dismiss.[1]

This court denies the motion to reconsider its earlier conclusion that the plaintiffs cannot sue the State Defendants under the ISTEA. Plaintiffs cite section 1309 of ISTEA to support their argument. Section 1309 does not provide a private cause of action against the State Defendants. Instead, section 1309 addresses state highway commissions, such as TXDOT, in relation to certain federally-funded highway projects that receive streamlined approval procedures. The IH-6 10 Rehabilitation Project and the IH-6 10 interchange with IH10 at issue in this case are not covered by section 1309. And, as defendants pointed out in their response to plaintiffs' motion to reconsider, Congress repealed this section of the ISTEA when it passed section 6002(1)(d) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act; A Legacy for Users (SAFETEA-LU), Pub. Law No. 109-59 (August 10, 2005). The motion to reconsider on the basis that ISTEA provides the plaintiffs a basis for suing the State Defendants is denied.

The plaintiffs argue that they would not be able to obtain relevant documents in the State

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[1] In this motion, plaintiffs also ask this court to "clarify" the effect of the brief summary of the "background facts" in the previous Memorandum and Opinion. The summary in that opinion did not constitute fact findings; the court was analyzing pleadings, not evidence.

Defendants' control if this court does not retain the State Defendants in the case. (Docket Entry No. 70 at 3). This argument fails. A need for discovery does not create jurisdiction. Moreover, the rules provide for discovery against third parties. And, as discussed more fully below, a court reviews agency action based on the administrative record before the agency when it made the challenged decision. *Inst. for Tech. Dev. v. Brown*, 63 F.3d 445, 450 (5th Cir. 1995); *Milena Ship Mgmt. Co. v. Newcomb*, 995 F.2d 620, 624 (5th Cir. 1993). A narrow exception permits a court to examine evidence beyond the administrative record if that evidence: (1) explains technical information or agency action not adequately explained in record; (2) shows an agency failed to consider relevant evidence; or (3) shows an agency, in bad faith, failed to include information it considered in the record. *Camp v. Pitts*, 411 U.S. 138, 142–43 (1973); *Northcoast Envtl. Ctr. v. Glickman*, 136 F.3d 660, 665 (9th Cir. 1998); *Fort Sumter Tours v. Babbitt*, 66 F.3d 1324, 1335 (4th Cir. 1995). The plaintiffs have not argued or shown that these factors are present so as to require discovery to obtain documents beyond the administrative record.

The plaintiffs incorrectly argue that this court identified the wrong standard for reviewing their challenges to the agency actions that led to the approval of the IH-610 West Rehabilitation Project from Post Oak through the IH-10 interchange. The plaintiffs rely on *United States v. Mead*, 533 U.S. 218 (2001), to support this argument. In *Mead*, the Supreme Court held that federal courts must provide only *Skidmore* deference, not *Chevron* deference, to a tariff-classification ruling by the United States

Customs Service. *Id.* at 221. In applying Skidmore deference, a court respects the agency's interpretation only insofar as it has the power to persuade. *Id.* at 235 (citing and discussing *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944)). The *Chevron* standard is more deferential. It applies when it is "apparent from the agency's generally conferred authority and other statutory circumstances that Congress would expect the agency to be able to speak with the force of law when it addresses ambiguity in the statute or fills space in the enacted law, even one about which Congress did not actually have an intent as to a particular result." *Mead*, 533 U.S. at 229 (internal citations and quotations omitted). In *Mead*, the Court analyzed the agency's authority to make the tariff-classification ruling at issue and the ruling itself (both in terms of process and substance). The Court concluded that Congress did not intend to delegate authority to Customs to issue classification rulings with the force of law. Instead, Congress contemplated that such rulings would bind only the specific parties to a dispute, not to serve as a precedent for other cases. *Id.* at 232–3 3. The fact that tariff-classification rulings are "churned out at a rate of 10,000 a year at an agency's 46 scattered offices" supported this conclusion. *Id.* at 233. The Court explicitly stated that *Mead* did not abrogate *Chevron*. In *Mead*, the Court only addressed a narrow issue, whether specific-tariff classification rulings challenged in litigation should receive *Chevron* deference. *See id.* at 227–32.

Plaintiffs cite no law to support their contention that *Mead* requires *Skidmore* deference in NEPA cases. Unlike the statute authorizing Customs to make tariff- classification rulings that

was at issue in *Mead*, the legislation authorizing the FHWA to approve federal funds for highway construction projects demonstrates that Congress intended that agency to speak with the force of law in interpreting highway regulations. Customs tariff-classification rulings involve substantially less process than the FHWA regulations, substantially less agency work, and affect only the parties before the Customs agency at any given time. By contrast, the highway regulations require substantial process, involve significant agency personnel, and necessarily affect large numbers of people.

*Chevron* deference is also appropriate because the plaintiffs seek review under the Administrative Procedures Act, 5 U.S.C. § 706. Under the APA, agency action may be held unlawful and set aside only if found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). The Fifth Circuit has continued to apply *Chevron* deference in cases challenging FHWA agency action under NEPA after the Supreme Court decided *Mead*. See, e.g., *City of Shoreacres v. Waterworth*, 420 F.3d 440 (5th Cir. 2005); *Davis Mountains Trans-Pecos Heritage Found. v. Fed. Aviation Admin.*, 116 Fed. Appx. 3 (5th Cir. 2004); *Spiller v. White*, 352 F.3d 235 (5th Cir. 2003). The Fifth Circuit's continued application of the *Chevron* "arbitrary and capricious" standard in cases reviewing FHWA agency actions under NEPA binds this court.

The plaintiffs also seek "clarification" as to whether this court's previous Memorandum and Order was "intended as a limitation on the standing of the Plaintiffs to seek relief from the cumulative

environmental impacts on behalf of all similarly situated stakeholders along the interchange." (Docket Entry No. 68 at 3). This court did not dismiss plaintiffs' claims that the defendants improperly analyzed, refused to analyze, or inappropriately rejected a full analysis of "cumulative harms" that plaintiffs assert on behalf of themselves and other residents impacted by the challenged construction project. These arguments are addressed below in this court's analysis of the NEPA claims.

The plaintiffs also seek "clarification" as to whether they may use the APA to pursue their claim that the Federal Defendants violated their Fifth Amendment rights. This court denies the plaintiffs' motion insofar as it seeks reconsideration of the previous Memorandum and Order dismissing the Fifth Amendment claims against the Federal Defendants. Plaintiffs' complaint does invoke the Fifth Amendment (see Docket Entry No. 37, ¶¶ 145 et seq.), but these sections of the complaint reiterate the same claims that are properly invoked under the APA and NEPA. The plaintiffs' own submissions to this court undermine their ability to claim that they suffered a "taking" cognizable under the Fifth Amendment. A taking claim requires a physical invasion of the plaintiff's land by the government, or government regulation that has denied the plaintiff "all economically beneficial or productive use of land." *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015 (1992). The plaintiffs have not alleged facts that, if proven, would make either showing. Because the plaintiffs have not stated a "taking" claim for which relief could be granted, this court denies the

motion to reconsider its grant of the defendants' motion to dismiss the Fifth Amendment claims.

The plaintiffs' motion for reconsideration is denied.

## III. NEPA and the Standard of Review

The FHWA has moved for summary judgment on the NEPA claims. The plaintiffs respond by arguing that disputed issues material to determining whether the FHWA violated NEPA in approving the IH-610 West Rehabilitation Project section at issue preclude summary judgment.

### A. The Legal Standards

In enacting NEPA, Congress sought "[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 42 U.S.C. § 4321. The statute requires, to the fullest extent possible, that Federal Government agencies:

include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

42 U.S.C. § 4332(2)(C). NEPA requires federal agencies to take a "hard look" at the environmental implications of their actions or omissions. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). The statute is procedural; it does not require "that agencies achieve particular substantive environmental results" but it is "action-forcing" in that it compels agencies to collect and disseminate information about the environmental consequences of proposed actions within their jurisdiction. *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 371 (1989).

The FHWA is governed by a set of regulations that require it to follow NEPA and Council on Environmental Quality ("CEQ") regulations. See 23 C.F.R. § 771.101 et seq. The FHWA is required to conduct a review of all "major Federal actions" within its jurisdiction to ensure compliance with NEPA. The CEQ regulations require an agency to designate actions that normally require an

Environmental Impact Statements (EIS), actions that normally require no environmental evaluation and may be regarded as a Categorical Exclusions (CE), and actions that fall in the middle and require an Environmental Assessment (EA). 40 C.F.R. § 1507.3(b)(2)). An EA results in either a determination that the action will have a significant environmental impact and require an EIS, or a "finding of no significant impact,"—FONSI—indicating that no EIS is needed. 40 C.F.R. § 1508.9(a)(1). "An EA should be brief." *Fritiofson v. Alexander*, 772 F.2d 1225, 1237 (5th Cir. 1985) (citing 40 C.F.R. § 1508.9; 33 C.F.R. § 230.9(b)). An EA should "include brief discussions of the need for the proposal, of alternatives . . . , of the environmental impacts of the proposed action and alternatives, and a listing of agencies and the persons consulted." 40 C.F.R. § 1508.9(b). The brief discussion should reflect "reasoned decision making" as to whether there is a sufficient likelihood of significant environmental consequences to require preparation of an EIS. *Fritiofson*, 772 F.2d at 1236 (citing *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 154 (D.C. Cir. 1985)).

The FHWA has divided federally-aided highway projects into three classifications: (a) Class I actions, which require that agencies prepare an EIS for all "major federal actions significantly affecting the quality of the human environment"; (b) Class II actions, which do not significantly affect the environment individually or cumulatively and qualify as Categorical Exclusions; and (c) Class III actions, in which the significance of the environmental impact is not clearly established. 23 C.F.R. § 771.115. Class III proposals require

preparation of an EA "to determine the appropriate environmental document required." *Id.* at § 771.115(c).

If a project qualifies as a Categorical Exclusion, the agency need not perform an EA or an EIS. A Categorical Exclusion is a category of actions that have been determined, because of their nature and past experience, not to have, individually or cumulatively, a significant effect on the human environment. 40 C.F.R. § 1508.4; 23 C.F.R. § 771.117. Such actions are "categorically excluded" from the requirement of either an EA or EIS review. Categorical Exclusion projects "do not induce significant impacts to planned growth or land use for the area; do not require the relocation of a significant number of people; do not have a significant impact on any natural, cultural, recreational, historic, or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impact on travel patterns; or do not otherwise either individually or cumulatively, have any significant environmental impacts." 23 C.F.R. § 771.117(a).

The FHWA regulations specify two categories of actions that may be categorically excluded from detailed NEPA review. See 23 C.F.R. § 771.115(b). The first category consists of a list of twenty different actions that are deemed to meet the general Categorical Exclusion requirements without any further administrative approvals or NEPA documentation. Examples of this class of actions are the installation of bicycle and pedestrian lanes, paths, and facilities, the installation of noise barriers and the installation of fencing where no substantial

land acquisition or traffic disruption will occur. See 23 C.F.R. § 771.11 7(c)(3), (6), (8). This category does not apply here. The second category is comprised of additional actions that may be designated as Categorical Exclusions after receiving administrative review and approval. Such administrative approval requires documentation demonstrating that the proposed action: (1) satisfies the general Categorical Exclusion requirements (40 C.F.R. § 1508.4 and 23 C.F.R. § 771.117(a)); and (2) will not result in significant environmental effects. The FHWA regulations provide a nonexclusive list of the types of actions that may qualify under this second category—the documented Categorical Exclusion category—including: (1) "[m]odernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing)"; (2) "[h]ighway safety or traffic operations improvement projects including the installation of ramp metering control devices and lighting"; and (3) "[b]ridge rehabilitation, reconstruction or replacement." 23 C.F.R. §771.117(d)( 1), (2), (3). The FHWA used the first portion of this second type of Categorical Exclusion in approving the IH-610 West Rehabilitation Project portion at issue in this case.

Even after a project is approved for Categorical Exclusion status, the project must be reviewed again to ensure that the classification remains appropriate. 23 C.F.R. § 771.129(c). The regulations contemplate an initial review and determination, with a reevaluation taking place before the applicant actually receives and begins using federal funds. Id. The FHWA can require

further documentation. *Id.* After a highway project is approved for Categorical Exclusion status, the ongoing review and consultation process may require further study of environmental impacts and proposed mitigation measures. See, e.g., *Pub. Interest Res. Group of N.J., Inc. v. Fed. Highway Admin.*, 884 F. Supp. 876, 882–83 (D.N.J. 1995) (state highway commission, which had received CE status for its project, conducted "an Environmental Reevaluation (the 'ER') to study any potential environmental impact resulting from the Project and to plan to minimize and mitigate any such impact").

The plaintiffs challenge the FHWA's decision to treat the IH-6 10 West project section at issue as Categorically Excluded. The issue is whether that decision was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *see also Sabine River Auth. v. United States Dep 't of Interior*, 951 F.2d 669, 677 (5th Cir. 1992) (abandoning the "reasonableness" standard in favor of the "arbitrary and capricious" standard based on intervening Supreme Court precedent). Courts have noted that "an agency's decision to categorically exclude a proposed project from environmental review 'is entitled to substantial deference.'" *Friends of Pioneer St. Bridge Corp. v. Fed. Highway Admin.*, 150 F. Supp. 2d 637 (D. Vt. 2001) (quoting *City of New York v. ICC*, 4 F.3d 181, 186 (2d Cir. 1993)); see also *Fla. Keys Citizens Coalition, Inc. v. United States Army Corps of Eng'rs*, 374 F. Supp. 2d 1116, 1139 (S.D. Fla. 2005) ("Deference is particularly appropriate where an agency is interpreting its own regulations in applying a categorical exclusion.") (citing *City of Alexandria v. Fed. Highway Admin.*, 756 F.2d 1014,

1020 (4th Cir. 1985)). A short, contemporaneous explanatory statement that the agency is invoking a Categorical Exclusion is normally all that is required. The statement's purpose is to inform the reviewing court that before approving the action, the agency did, in fact, consider whether the Categorical Exclusion applied. See *Wilderness Watch v. Mainella*, 375 F.3d 1085, 1095 (11th Cir. 2004) ("Documentation of reliance on a categorical exclusion need not be detailed or lengthy. It need only be long enough to indicate to a reviewing court that the agency indeed considered whether or not a categorical exclusion applied and concluded that it did. . . . In most instances, a short statement that a categorical exclusion has been invoked will suffice to assure a reviewing court that environmental effects have been considered."). A Categorical Exclusion may be used even in environmentally sensitive areas, so long as the applicable criteria and documentation are satisfied. *See Krichbaum v. United States Forest Serv.*, 17 F. Supp.2d 549, 558 (W.D. Va. 1998) (upholding reliance on Categorical Exclusion, even though the project area included municipal watershed); see also *Sw. Ctr. for Biological Diversity v. United States Forest Serv.*, 100 F.3d 1443, 1450 (9th Cir. 1996) (agency may invoke Categorical Exclusion even if endangered or threatened species are present based on determination that project will not negatively impact the species).

In *City of Alexandria*, the court deferred to the FHWA's reliance on the Categorical Exclusions listed in its regulations in approving a highway-safety improvement project. According to the court, "the more specific examples of categorical exclusions

listed in the regulations, rather than a party's or our own notions of substantiality," should govern the decision whether a project is properly considered not to have significant environmental impacts and appropriate for Categorical Exclusion status. 756 F.2d at 1019. In so ruling, the court noted that, although the project at issue had gone through five years of planning, required the expenditure of millions of dollars, and involved the second busiest highway in the county, these factors did not determine whether a Categorical Exclusion was available. Instead, the determinative factors were the environmental impacts. *Id.* The court further ruled that, if the record indicates an agency has considered environmental impacts, the agency's decision as to whether the impacts are significant merits deference. In that case, although plaintiffs had submitted some evidence suggesting that the project could potentially result in the diversion of traffic from the highway to local streets, the court deferred to the FHWA's conclusion that such possible impacts were likely to be insubstantial. *Id.* at 1021. Similarly, in *Florida Keys Citizens Coalition*, the court rejected challenges to the treatment of a highway improvement project in the Florida Keys as a Categorical Exclusion:

> [G]iven the agency's documented determination that the Road Safety Improvements will not add any general purpose travel lanes and involve only minimal roadway widening for safety and not capacity improvements, that these improvements will not have significant growth or travel impacts, that the improvements will not induce significant impacts on planned growth or land

> use or have significant impacts on travel patterns, that they will be entirely within the existing right-of-way, thus, not causing the relocation of significant numbers of people, and that an original Project purpose, accommodation of growth in the Florida Keys, was eliminated by downsizing it from the original four lanes to two lanes.

374 F. Supp. 2d at 1141.

The statutory and regulatory analysis discussed in these cases must be applied to the administrative record the parties submitted.

**B. The Administrative Record**

The administrative record submitted to this court consists of the following: (1) Environmental Assessment (EA) dated August 1991; (2) Categorical Exclusion (CE) dated December 1992; (3) Public Hearing Summary and Certification from TXDOT from the June 15, 2000 public hearing; (4) Reevaluation dated June 2001 ("2001 Reevaluation"); and (5) Reevaluation dated July 2004 ("2004 Reevaluation"). The FHWA also submitted affidavits from John Mack, a District Engineer for the FHWA; Gabriel Y. Johnson, a TXDOT engineer currently serving as Director of Transportation Planning and Development for the Houston District; A. Hassan Nikooei, a TXDOT engineer currently serving as Project Manager of Advanced Project Development for the Houston District; and Claude Patrick Henry, a TXDOT engineer currently serving as Director of Project

Development. The affidavits are relevant to this inquiry to authenticate the submitted documents.

1. *The 1991 Environmental Assessment Report*

The 1991 Environmental Assessment, (Docket Entry No. 48, Ex. 1-1), was issued by TXDOT.[2]2 The EA begins with a discussion of the history of IH-610 West and the severe traffic and safety problems it presented. The 1991 EA noted that IH-6 10 West between I-10 West and US-5 9 South, opened in 1966, had experienced a ninety percent increase in average daily traffic between 1969 to 1989, making it the second most congested roadway in Harris County. (The busiest was IH-10 West between the intersection of IH-610 West and a road just west of the intersection.) The report noted that the 1989 average daily traffic count of 218,000 vehicles per weekday and the predicted future count of 350,000 vehicles per weekday by 2010 greatly eclipsed the existing capacity of 150,000 vehicles per weekday. (*Id.* at 8–9). In short, traffic capacity could not meet future demands. The 1989 accident rate on IH-610 between North Braeswood and IH- 10 was over 1.5 times that national average and over twice as high as the accident rate in 1980. The EA noted that the traffic load, plus age, weather, and earth settlement, had combined to undermine the infrastructure of IH-6 10 West. (*Id.* at 9). TXDOT explained that the West Loop "is no longer current with today's design standards." The Loop did not have sufficient

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[2] The defendants attached the 1991 Environmental Assessment to the 1992 Categorical Exclusion report.

distances between entrance ramps and subsequent exit ramps; the ramps were not long enough to provide necessary acceleration and deceleration distances; and inadequate vertical clearances underneath cross-street overpasses. (*Id.* at 2–3, 9). There were insufficient auxiliary lanes, resulting in the use of shoulder lanes as auxiliary lanes in many areas that in turn removed the availability of shoulders as emergency stopping "safety zones." (*Id.* at 9). The introduction concluded by stating, "every option short of reconstruction has been exhausted to safely increase the capacity on IH 610W." (*Id.* at 10).

The 1991 EA analyzed an ambitious construction plan: widening the freeway from eight to twelve mainlanes, with accompanying grade-separated or "braided" on- and off- ramps. (*Id.* at 11). (A "braided" ramp structure means that one ramp goes over another.) The 1991 EA identified the specific highway segments that the construction project would affect and described the proposed modifications. (*Id.* at 12–13). The "Alternatives Considered" portion of the 1991 EA report noted that members of the public objected in early 1990 after newspaper articles described initial proposals to create elevated express lanes in one section of the highway. (*Id.* at 19). Groups representing nearby businesses, particularly those in and around the nearby densely-populated shopping and office complex known as the Galleria, neighborhood associations, and environmental groups expressed concerns "that the elevated express lanes would create noise and visual impacts to the area, and negative environmental impacts to Memorial Park, the Arboretum, and Buffalo Bayou." (*Id.*). As a result of the objections, the Texas Highway Commission

appointed a task force known as the West Loop Joint Committee consisting of representatives "from all of the groups expressing concerns[ ] to assist in the development of viable alternatives for" the Galleria-Post Oak segment of the project.[3] (*Id.* at 20). "Numerous meetings were held between [TXDOT] and local business interests, public agencies, neighborhood and environmental groups from mid-1988 through late 1990 to discuss the proposed improvements to the facilities." (*Id.* at 19).

The 1991 EA report described and evaluated twelve options for achieving "the most efficient and safe freeway practicable." (*Id.* at 14). The task force selected three options for further study. The EA focused on these three options: (1) "Option 10," TXDOT's original proposal, which featured two elevated express lanes, widened mainlanes, and lengthened and improved entrance and exit ramps ; (2) "Option 11," which featured two express lanes depressed below ground level; and (3) "Option 12," the preference of community members, which featured five dedicated express lanes in each direction between US-59 South and IH10 West, with no entrance/exit ramps other than access from the interchanges. This option required local traffic to use two seven-lane collector/distributor "facilities," consisting of four "collector" through lanes in each direction on the outer side of the express lanes and a

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[3] Members included representatives of area businesses, the public transit authority, the City Planning Commission and Parks Department, representatives from groups involved with the area parks, representatives of neighborhood groups, and volunteer professional engineering and architectural consultants. (*Id.* at 21).

three- lane frontage "distributor" road providing access to and from the collector road. (*Id.* at 14–16).

TXDOT rejected Option 11 as cost-prohibitive; the initial estimate was over $401 million, compared with $241 million and $261 million for Options 10 and 12, respectively. (*Id.* at 24). The locally-preferred Option 12 was rejected in part because of the rights-of-way required. Option 12 would require the acquisition of approximately 30 acres of additional rights-of-way and would cause 22 displacements. Option 10 would require approximately 21 additional acres for rights-of-way with 15 displacements, while Option 11 would require approximately 28 additional acres with 25 displacements. (*Id.* at 27–2 8).

The 1991 EA evaluated Options 10 through 12 for environmental impact, including land use, farmlands, social and economic considerations, right-of-way acquisition and relocation, noise, air quality, flood plains, runoff and drainage, navigable waterways and coastal zones, water quality, historical/archeological resources, endangered species, public parklands/natural areas, construction impacts, visual and aesthetics, and coordination with other environmental agencies. (*Id.* at 26–47). Most relevant to this case, the EA included a detailed noise analysis performed in conformity with FHWA standards. (*Id.* at 30–36 & Ex. O). The 1991 EA presented the following conclusions:

> Due to the magnitude of the proposed project, and the fact that the impacts on the surrounding area are expected to be significant, an Environmental Impact Statement (EIS) will be prepared. Following

> the studies conducted as a part of this Environmental Assessment, Option 10 and Option 12 should be further evaluated in the EIS.

(*Id.* at 49).

Public uproar over the proposal TXDOT recommended in the 1991 EA—significantly widening the highway—resulted in TXDOT scrapping the proposal and submitting a much less ambitious plan that would not increase traffic capacity. TXDOT instead proposed to rehabilitate and modernize the West Loop rather than widen it, eliminating the major elements included in the plan evaluated in 1991. TXDOT submitted a report with the goal of securing a documented Categorical Exclusion in December 1992.

*2. The 1992 Categorical Exclusion Report*

The December 1992 TXDOT Categorical Exclusion report is 17 pages of text plus several tables, maps, and other technical data. (Docket Entry No. 48, Ex. 1). This report studied a less ambitious plan to rehabilitate IH-610 after the 1991 plan sparked substantial public opposition. (*See, e.g.*, Docket Entry No. 48, Aff. of John Mack, ¶5). This proposal did not attempt to add capacity to the highway, but instead to make it capable of handling traffic more efficiently and safely. The report evaluated the proposed rehabilitation of I-610 West from West Bellfort/South Post Oak to IH- 10 West. The proposed project would require 4.1 acres of additional rights-of-way and 15 displacements, much

less than the previous options set out in the 1991 EA report. (Docket Entry No. 48, Ex. 1 at 1, 17).

The 1992 Categorical Exclusion report repeated the 1991 report's description of the design problems that required remediation: (1) insufficient distances between existing entrance ramps and subsequent exit ramps; (2) insufficient ramp lengths to provide distances needed for acceleration and deceleration; (3) inadequate vertical clearances beneath certain cross-street arterial overpass structures; (4) inadequate vertical profiles; and (5) shoulders being "temporarily" used as auxiliary lanes. (*Id.* at 2). The West Loop was "no longer current with today's design standards," including: (1) the overpasses did not meet vertical clearances now required over crossing arterials; (2) vertical profiles such as vertical grades and curve lengths were inadequate for the desired design speed and "respective stopping sight distance"; and (3) many access ramps had inadequate length to serve queues during peak hour loading. (*Id.*). The 1992 report also noted deterioration from years of heavy traffic, age, exposure to weather, and soil settlement. The report described the project goals as creating a more efficient and safer public transportation facility, rehabilitating the pavement, replacing bridge structures, reconstructing exist ramps, improving direct connectors, adding auxiliary lanes, reversing and/or relocating ramps, proving U-turns, and related improvements. (*Id.*). In short, the proposed improvements were needed to "enhance traffic operation and improve safety conditions of the freeway" and were necessary "to upgrade the operation of the mainlanes of the entire IH 610 Loop." (*Id.* at 2–3).

The 1992 Categorical Exclusion report assessed the project setting (the types of residential, business, and cultural dwellings in the area), traffic volumes, environmental impacts, social and economic considerations, right-of-way acquisition and relocation, utilities, noise, air quality, water quality, historical/archeological resources, wildlife, vegetation, and construction impacts of the project. (*Id.* at 3–17). Most relevant to this case, the noise-impact analysis is particularly detailed. The report noted that the projected traffic- noise impact exceeded the FHWA's noise criteria of 67.0 dBA(LEQ) for residential land use and 72.0 dBA (LEQ) for commercial land use along the highway.[4] (*Id.* at 8). The report analyzed available mitigation measures. The report rejected vehicle restrictions as inappropriate for noise mitigation because IH-610 serves as a major truck route in Houston. The report rejected construction of berms or "buffer zones" for noise mitigation because they would require additional acquisition of rights-of-way, causing greater displacement of residences and businesses and making the cost prohibitive. Notably, the report stated that "[s]ignificant changes in horizontal or vertical alignment were not considered because these types of changes would be beyond the scope of the proposed project." (*Id.*). The 1992 Categorical

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[4] Decibels are indicated as "dBA." The FHWA uses "Leq" to measure the average traffic sound level. The typical sound in a library is 40 dBA; an air-conditioning unit outside and a clothes dryer at 1 meter inside average 60 dBA; the average street noise of a large city and the sound of a garbage disposal inside at 1 meter average 80 dBA. (Docket Entry No. 41, App. B at 9 (listing FHWA-approved sound level comparisons)).

Exclusion focused on construction of noise-abatement walls to mitigate the noise problems.

None of the environmental impacts other than noise analyzed in the report raised concerns. The only "open spaces" potentially at risk were Memorial Park and the Houston Arboretum and Nature Center. (*Id.* at 4). The Categorical Exclusion report concluded that the project would not adversely affect these areas because the section of Memorial Park near the highway was heavily wooded and provided "few active activities near the freeway." (*Id.*). The report also concluded that the Arboretum would not be affected by the project. (*Id.*). The proposed project would not adversely impact any minority group or physically divide neighborhoods. (*Id.* at 5–6). The necessary right-of-way acquisitions included five homes in a subdivision, an abandoned retail facility, a transmission tower maintenance building, a hotel, a strip shopping center, four retail facilities, an auto mechanic shop, and a service station. (*Id.* at 6). In the report, TXDOT stated its policy to provide relocation assistance and just compensation to all relocated parties and its intention to proceed only after "all displaced families and business have been provided the opportunity to relocate to adequate replacement sites." (*Id.* at 7). TXDOT ' s testing did not reveal potential air or water quality problems from the project. (*Id.* at 11). The project did not intrude on any known archeological sites. The project area included no endangered or threatened species, nor any threatened vegetation. (*Id.* at 13–14). The report concluded by stating: "Due to the nature of the proposed improvements a Categorical Exclusion is anticipated." (*Id.* at 17).

The 1992 Categorical Exclusion report included several tables and charts with specific data. Table 1 consisted of a description of each "roadway segment" in the project and the proposed improvement. The proposed improvements matched TXDOT's summary description: improvement of geometrics; merging of lanes; addition and deletion of auxiliary lanes; addition, realignment, and deletion of ramps; and improvement and addition of U-turns and other turn lanes. Table 1 detailed 84 specific alterations to frontage roads or portions of the highway. Table 2 compared existing and predicted noise levels based on FHWA-approved tests. Table 3 listed similar data juxtaposed with proposed noise barrier locations, the mitigating effect of such noise barriers, and a recommended noise barrier proposal. Table 4 summarized the noise-barrier wall proposals for the project, including the height, length, and cost of each barrier. Table 5 provided further cost analysis, comparing the cost of each barrier, number of residents impacted, and the cost per resident of each proposed barrier. Table 6 provided data supporting the air quality conclusions. The 1992 Categorical Exclusion report also included detailed maps of the project area. The FHWA approved the project as a Categorical Exclusion, as TXDOT proposed.

*3. The 2000 Public Hearing*

On June 15, 2000, TXDOT held a public hearing on the IH-6 10 Rehabilitation Project. TXDOT published notices of the hearing in the *Houston Chronicle*, the large-circulation daily newspaper. The meeting took place at a public school in Houston. (Docket Entry No. 48, Ex. 2). At the

meeting, TXDOT officials explained the design plan, displayed schematics of the project, and received written and oral questions and comments from those present. TXDOT's hearing summary noted that the "attendees could be divided into two groups[:] those concerned with issues related to the noise abatement and those concerned with issues related to the potential for increased traffic on the frontage roads." (Docket Entry No. 48, Ex. 3 at 2). The hearing summary stated that the focus of the noise-related comments was: (1) the need to extend proposed noise-abatement barriers; (2) building noise-abatement barriers where none were proposed; (3) constructing elevated ramps in areas where noise abatement was not proposed; and (4) increased traffic on frontage roads. (Id.). The defendants included as part of the administrative record a transcript of the meeting, the written comments and TXDOT's responses, a copy of an environmental report about the project area, and copies of the schematics displayed at the meeting. (Docket Entry No. 48, Exs. 2–5). TXDOT submitted these materials to the FHWA with the 2001 Categorical Exclusion Reevaluation.

In affidavits and other documents, the plaintiffs complain that the 90-minute meeting was an inadequate public hearing; that the TXDOT officials present were rude and unresponsive to questions; and that the information presented at the meeting did not include a full description of just how high the proposed exit ramp or the related mainlanes and connectors would be. The plaintiffs' criticisms of to the adequacy of the discussion and information are analyzed below.

*4. The 2001 Reevaluation*

The June 2001 Reevaluation begins by explaining that it "is a reevaluation of a segment of the proposed project from south of Westpark to IH 10W, which is approximately 3.8 miles." (Docket Entry No. 41, App. A at 1). According to the report, the entire project for which TXDOT obtained a Categorical Exclusion is 7.53 miles. The introduction also explains that "[t]he Environmental Assessment for the entire IH 610W project, from IH 10W to West Bellfort, received a Categorical Exclusion (CE) on August 17, 1993." (*Id.*). The 2001 Reevaluation largely follows the structure of the 1992 Categorical Exclusion report.

The 2001 Reevaluation listed many of the same problems and the need for improvements included in the 1992 Categorical Exclusion report. The 2001 Reevaluation updated the traffic statistics and includes consideration of new features not required in 1992, such as specific consideration of "environmental justice" issues. (*Id.* at 2, 12). The Reevaluation included a project design description and a table comparing it with the design proposed in the 1992 Categorical Exclusion report. (*Id.* at 6–10). Proposed changes to the bridges included: (1) widening the new bridges to accommodate an additional traffic lane; (2) incorporating fewer bridge pilings for new frontage road designs; (3) placing new bridge pilings outside of the stream channel, eliminating any modification or direct disturbances of Buffalo Bayou and the need for obtaining new rights of way; and (4) placing some new bridge pilings below the ordinary high water line, necessitating the acquisition of permits from the

United States Corps of Engineers. (*Id.* at 6–7). Proposed changes to the road design included: (1) widening Katy Road to the first Woodway exit ramp to 4 lanes; (2) adding a grade separated ramp and dropping an auxiliary lane at the first Woodway exit ramp; (3) widening the first Woodway exit ramp to the IH- 10 direct connector to 3 lanes; (4) eliminating the plan to widen to three lanes the area covering IH- 10 to the direct connector; (5) eliminating the plan to improve geometrics and continue an auxiliary lane at the San Felipe entrance ramp; (6) continuing an auxiliary lane from the San Felipe entrance ramp to the Hidalgo/Richmond exit ramp; (7) dropping (instead of maintaining) an existing auxiliary lane on the Hidalgo/Richmond exit ramp; (8) moving (instead of deleting) the Richmond exit ramp to north of Hidalgo; (9) improving geometrics from the Hidalgo/Richmond exit ramp to US-59 direct connector; (10) adding 1 main lane and 1 auxiliary lane (instead of only 1 auxiliary lane) to the US-59 direct connector; (11) relocating the Richmond entrance ramp (instead of adding a grade separated ramp); (12) maintaining the existing geometrics (in lieu of "improving" them) from the Post Oak entrance ramp to the Woodway entrance ramp; (13) continuing the auxiliary lane from the Post Oak entrance ramp to the IH- 10 direct connector; (14) creating a 2 lane entrance ramp splitting IH-6 10 and the IH- 10 direct connector (instead of improving geometrics and adding a second auxiliary lane) at the Woodway entrance ramp; (15) adding a lane at the southbound Main lane over the IH-10 interchange (instead of leaving this area as-is); (16) eliminating the original plan to add a northbound-southbound U-turn and to improve geometrics and channelization at Memorial;

(17) adding the U-turn and a northbound, left-turn lane (instead of improving existing U-turns, lane approaches, channelization, and geometrics) from Woodway to Post Oak; (18) adding a northbound, left- turn lane and a southbound right-turn lane at San Felipe; (19) adding additional turn lanes (in addition to those previously planned) at Westheimer; (20) adding auxiliary lanes between ramps from Westheimer to the Richmond northbound frontage road; and (21) realigning Westheimer to the Richmond southbound frontage road to accommodate ramp improvements. Approximately twenty-eight of the project design proposals were not changed from the 1992 Categorical Exclusion report.

The 2001 Reevaluation discussed three alternatives: a no-build alternative; improving the highway facility without using Memorial Park land; and building on a new location. (*Id.* at 11). The Reevaluation explained that "[t]he no build alternative is not preferred because this alternative would leave an existing facility in place that does not meet current design standards and would not alleviate the current traffic problems." (*Id.*). The report also noted that improving IH-6 10 with no impact to Memorial Park at all would be impossible because the park borders both sides of the highway. The final alternative, building an entirely new highway, "might help alleviate congestion to the existing facility but would possibly result in far more impacts to Memorial Park and to the human and natural environment than the currently proposed project." (*Id.*).

The 2001 Reevaluation report noted that unlike the 1992 Categorical Exclusion proposal,

which would have resulted in the acquisition of 4.1 acres of rights-of-way and 15 displacements (5 residences and 10 businesses), the amended design project required the acquisition of 2.9653 additional acres to obtain rights-of-way and would produce only 2 displacements, both businesses. (*Id.* at 12). The 2001 Reevaluation report identified the areas of analysis that remained unchanged from the earlier Categorical Exclusion report: (1) environmental justice/socioeconomic impact of the project; (2) land use; (3) farmlands; (4) cultural resources; (5) wetlands; (6) water quality; and (7) navigable waterways. The following areas received additional analysis and discussion: (1) soils; (2) vegetation; (3) wildlife; (4) threatened and endangered species; (5) migratory bird treaty act; (6) essential fish habitat; (7) parkland; (8) flood plains; and (9) air quality. The 2001 Reevaluation concluded that the project changes did not result in significant predicted environmental impacts. Additionally, TXDOT agreed to a land exchange with the City of Houston to lessen the effect on Memorial Park. According to the Reevaluation report, the land exchange would "actually produce a net gain for Memorial Park." (*Id.* at 22).

The 2001 Reevaluation included a noise analysis. Like the previous Categorical Exclusion report, the 2001 Reevaluation concluded that "the project will result in traffic noise impact" necessitating noise-abatement measures. (*Id.* at 28). In the Reevaluation, TXDOT considered the following measures: traffic management; alteration of horizontal and/or vertical alignments; acquisition of undeveloped property to act as a buffer zone; and construction of noise barriers. (*Id.*). The

Reevaluation report noted that implementing a specific noise-abatement measure requires a finding that the measure is both "reasonable" and "feasible." The report defined the criteria: "In order to be feasible, the measure should reduce noise levels by at least five dBA at impacted receivers; and to be reasonable it should not exceed $25,000 for each receiver." (*Id.*). The report included detailed noise measurements from receivers placed around the project site. In the report, TXDOT rejected traffic-management devices as a noise-abatement measure because the minor benefit the devices would provide—one dBA per five mph reduction—was outweighed by the increase in congestion and air pollution the devices would create. (*Id.* at 30). TXDOT rejected altering horizontal and/or vertical alignments as a way to reduce noise because those alterations would displace existing businesses and residences and require acquisition of additional rights-of-way, making this option neither cost-effective nor "reasonable." (*Id.*). TXDOT rejected the use of buffer zones because no undeveloped land existed that could be acquired for this purpose. (*Id.*).

As noted in the earlier Categorical Exclusion and Environmental Assessment reports, barrier walls presented a "reasonable" and "feasible" noise-abatement measure for certain areas along IH-610 West. The 2001 Reevaluation recommended placing noise barriers in two locations: one barrier wall 1253 feet long and 18 feet tall to be placed in the northeast quadrant of the US-59 and IH-610 interchange, and another barrier 552 feet long and 22 feet high to be placed in the Afton Oaks subdivision. (*Id.* at 30 & Exs. C1, C3, C5). The 2001 Reevaluation report included assurances that the

project contractors would limit construction noise to the extent possible and stated that TXDOT had sent copies of the traffic-noise analysis to local officials. (Docket Entry No. 41, App. A at 32).

The 2001 Reevaluation report included a list of hazardous materials sites and concludes that there was a potential for "environmental impairment" for those sites located near the project. (Id. at 41). In the report, TXDOT noted that the "proposed alignment avoids most tracts that indicate a potential for environmental impacts within the corridor site vicinity." (Id.). The report stated that if TXDOT encountered contamination during construction, it would develop and implement appropriate management plans. (Id.).

Finally, the 2001 Reevaluation report stated that the project would yield minimal secondary or cumulative impacts after completion. (*Id.* at 42). The project's lasting impact, compared to the no-build alternative, would be "the existence of a roadway that is safer than the current facility," that is "up to current highway standards," and that would result in improved traffic flow through the area, and as a result decrease potential levels of air pollution. (*Id.*). TXDOT concluded the 2001 Reevaluation report by noting that "[w]ith few exceptions, noted above [in the report], the CE remains valid. . . . therefore, revisions to the CE are not deemed necessary." The FHWA agreed.

*5. The 2004 Reevaluation Report*

TXDOT submitted a second Reevaluation report in July 2004. (Docket Entry No. 41, Appendix

B). This Reevaluation report evaluated the project's "last segment extending from south of Post Oak Boulevard to IH 10 West." (*Id.* at 1). According to the defendants, TXDOT conducted this reevaluation at the FHWA's request after learning that certain aspects of the noise analysis set out in the 2001 Reevaluation report were inaccurate. Accordingly, the 2004 Reevaluation refers back to the 2001 Reevaluation throughout, except for the section on noise.

The "Traffic Noise" section of the 2004 Reevaluation report stated that "[t]he previous noise analysis remains valid for all land use activity areas adjacent to the segments of the proposed project with the exception of the residential area along North Post Oak Road. Refinements/adjustments in the elevations of the roadways adjacent to this residential area were sufficient to require a new, updated traffic noise analysis." (*Id.* at 8). As in the previous reports, the 2004 Reevaluation discussed the governing FHWA standards for Noise Abatement Criteria and testing procedures, then supplied the results of TXDOT's testing. All fourteen receivers tested in this area reflected noise impact from the project. (*Id.* at 12). TXDOT predicted an average increase of 4 dBA for four receivers; an increase of 5 dBA for seven receivers; an increase of 6 dBA for two receivers; and an increase of 9 dBA for one receiver. (*Id.*). This area studied, which is near the plaintiffs' residence, reflects increased noise impact above the levels predicted in the original Categorical Exclusion and the 200[illegible] Reevaluation.

In the 2004 Reevaluation report, TXDOT evaluated the noise-abatement measures examined

in the 2001 Reevaluation report. TXDOT concluded that noise-barrier walls remained the only "feasible" and "reasonable" option for three locations (one more than found in the previous Reevaluation). TXDOT tested potential barriers by conducting a "noise workshop" for adjacent property owners. (*Id.* at 14). Owners of property adjacent to two of the three proposed locations for barrier walls approved them (with the exception of a section of the noise barrier in front of one home). Owners of property adjacent to one proposed location rejected the barrier wall. The 2004 Reevaluation report stated that this third barrier wall would not be included in the project, but that TXDOT would incorporate the approved barrier walls.

The 2004 Reevaluation report concluded by stating that "revisions to the CE are not deemed necessary." The FHWA again agreed.

**C. The Plaintiffs' Summary Judgment Evidence**

Ware conducted a noise analysis that purports to conform to the FHWA Traffic Noise Model that TXDOT used in the 2004 Reevaluation. The plaintiffs included Ware's analysis in the summary judgment record. (Docket Entry No. 51, Exs. 6, 10). Ware's study, which is described more fully later in this opinion, used a simplified model of the software TXDOT used and found a greater noise impact than TXDOT had reported. The plaintiffs also submitted an article from the *Houston Chronicle* dated June 15, 2000, which claims that Norm Wigington, a TXDOT spokesman, stated that TXDOT would hold another public hearing "before the work is contracted in

2003." (*Id.*, Ex. 19). The plaintiffs submitted bills for contractors working on the project, (*id.*, Ex. 20), and affidavits from Patrick Claude Henry, a TXDOT engineer, from litigation involving a different segment of this project, (*id.*, Ex. 25). The plaintiffs submitted TXDOT's Guidelines for Analysis and Abatement of Highway Traffic Noise, dated June 1996. (*Id.*, Ex. 28). The plaintiffs also submitted their own affidavits, as well as an affidavit from Robert A. Silverman, who lives in plaintiffs' neighborhood and was involved in litigation challenging a different highway construction project. (*Id.*, Exs. 29–31). The plaintiffs also submitted substantial correspondence with other community members and public officials, including TXDOT personnel and state and local elected representatives. This evidence, which criticizes the agencies' methodology and procedures and describes the negative impacts these individuals anticipate from the IH-610 West Rehabilitation Project, is offered in support of the claims that the FHWA improperly designated the project as Categorically Excluded because of the noise and visual impacts it will have, and that the FHWA relied on a flawed process in making the Categorical Exclusion determination.

### D. The Decision to Use Categorical Exclusion Status

The plaintiffs focus on the noise-impact analyses in the 1992 Categorical Exclusion, 2001 Reevaluation, and 2004 Reevaluation, contending that the noise that will result from the elevated mainlanes and connectors at the IH-610 West section near and at the IH-10 interchange made the

project ineligible for Categorical Exclusion approval. The plaintiffs allege that the FHWA's acceptance of TXDOT's incorrect noise analysis in 2001 and refusal to revisit the issue after TXDOT conceded its error yet reached the same ultimate conclusion in the 2004 Reevaluation, resulted in an improper grant of Categorical Exclusion status. The plaintiffs argue that the FHWA did not reveal the underlying assumptions behind the noise analyses performed, and that the record reveals problems with the methodology used and the reliability of the conclusions drawn from these studies. The plaintiffs complain that the noise analysis performed in 1992 and repeated in the 2001 Reevaluation used incorrect assumptions and methodologies. More specifically, the plaintiffs assert that TXDOT and the FHWA relied on inaccurate traffic counts, which caused the predicted noise-impact levels to be lower than realistically expected. The plaintiffs point to the statement in the 1992 Categorical Exclusion report that "significant changes in the horizontal or vertical alignment were not considered because these changes would be beyond the scope of the project," and argue that TXDOT's subsequent decision to realign and raise the elevation of certain ramps, lanes, and connectors demonstrates that the noise analysis was fundamentally flawed. The plaintiffs allege that TXDOT deliberately left the planned elevation changes out of the 2001 Reevaluation report because their inclusion would have compromised the project's Categorical Exclusion status. (Docket Entry No. 70 at 7). The plaintiffs contend that the corrected noise analysis appearing in the 2004 Reevaluation, which showed a higher noise impact on plaintiffs' neighborhood than the 1992 Categorical Exclusion report or the 2001

Categorical Exclusion Reevaluation report, demonstrates that TXDOT used, and the FHWA credited, improper methods from the outset. (Docket Entry No. 70 at 6).

"This Court is not a super professional transportation analyst charged with the duty of determining the propriety of competing methodologies." *Comm. to Pres. Boomer Lake Park v. Skinner*, No. CIV-9 1-191 8-R, 1992 WL 535953 (W.D. Okla. May 21, 1992) (quoting *Druid Hills Civic Ass'n, Inc. v. Fed. Highway Admin.*, 772 F.2d 700, 711 (11th Cir. 1975) (internal marks omitted)). The administrative record shows that TXDOT conducted the noise analyses in accordance with FHWA-approved specifications and regulations. Each of the project studies from the 1991 EA forward assessed the projected noise impact. The potential noise impacts received more attention than any other aspect of the project. In 2004, TXDOT performed a new tests and submitted the results to the FHWA, which agreed that the 2004 Reevaluation noise impact results did not alter the decision that the project qualified for a Categorical Exclusion status. The 2004 Reevaluation states the reason for the new study: the 2001 Reevaluation had failed to take into account the changes to the roadway elevations adjacent to North Post Oak Road and the effect those changes would have on the amount of noise produced. Indeed, the stated reasons for the noise-analysis reevaluation are consistent with plaintiffs' assertion that the elevation increases also increased the noise levels that would result and had not been taken into account in predicting noise impact. The fact that TXDOT issued the 2001 Reevaluation to take into account the numerous

changes to the project design since the 1992 Categorical Exclusion Evaluation, and then further revised the Reevaluation in July 2004 after learning that the 2001 noise analysis did not fully take into account the elevation increases in the highway section adjacent to plaintiffs' neighborhood, does not mean that the entire methodology is flawed.

The plaintiffs admit that Ware's competing noise analysis does not follow the FHWA specifications or requirements. Ware states that he used a "simplified" version of the noise- analysis software TXDOT used in July 2004. (See Docket Entry No. 37, ¶¶109–10; Docket Entry No. 51, Ex. 31, ¶¶48–49). Ware's noise analysis presents different readings than the 2004 Reevaluation produced, but his affidavit states that he did not intend his test to show that his results were right and TXDOT's wrong. Instead, Ware only wanted "to show that the assumptions can have a large impact on the results, and that it is obvious that they [the assumptions underlying the noise analysis] have to be disclosed." (Docket Entry No. 51, Ex. 31, ¶49). Even if the plaintiffs' evidence of noise-impact results could meaningfully be compared with the agency's results, "[t]he court is not empowered to decide that the views of the plaintiffs' experts have more merit than the agency's experts." *Hells Canyon Pres. Council v. Jacoby*, 9 F. Supp. 2d 1216, 1240 (D. Or. 1998) (citing *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1332–33 (9th Cir. 1992)); see also *Public Interest Res. Group of N.J.*, 884 F. Supp. at 891 ("If all that is necessary to require an EIS or EA is a conflicting expert's opinion, the agency's process would be meaningless.") (citations omitted)).

The plaintiffs argue that this court should reject the agencies' conclusions under the standards of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). These cases govern a court's gatekeeper role with respect to expert testimony. When, as here, "the Court's review is limited to ensuring that the process that produced the result complies with NEPA," *Protect Key West, Inc. v. Cheney*, 795 F. Supp. 1552, 1559 (S.D. Fla. 1992), the *Daubert* standard is difficult to apply. Although the plaintiffs argue that more information about the assumptions TXDOT used in the tests should be disclosed, the plaintiffs do not appear to dispute that the procedures used complied with the FHWA-approved standards. And although the plaintiffs argue that TXDOT did not take into account the elevation increases in conducting the 2001 noise analysis, the plaintiffs do not appear to dispute the 2004 revised noise analysis, which showed an increase of 4 to 6 decibels in two receivers and of 9 decibels in one receiver over the 2001 results. (*Compare* Docket Entry No. 41, App. B at 11–12 (2004 Reevaluation) *with id.*, App. A at 29 (2001 Reevaluation)).

The plaintiffs' claim that the noise analysis used is "insufficient in scope," (Docket Entry No. 70 at 14), collapses the question into the answer. A Categorical Exclusion project by definition is not required to provide the level of analysis or documentation required for classes of projects that require an EIS or an EA. All the reports the FHWA approved included a noise-analysis study that used federally-approved procedures. Each report found additional noise impact on the affected areas and

concluded that with recommended mitigation measures, that impact was not so "significant" as to require an EA or an EIS.

The plaintiffs' argument that the FHWA could not permissibly rely on the Categorical Exclusion to avoid EIS and EA documentation requirements fails as a matter of law. (Docket Entry No. 70 at 10). Deference to an agency "is particularly appropriate where an agency is interpreting its own regulations in applying a categorical exclusion." *Fla. Keys Citizens Coalition*, 374 F. Supp. 2d at 1139 (citing *City of Alexandria*, 756 F.2d at 1020). "Documentation of reliance on a categorical exclusion need not be detailed or lengthy. It need only be long enough to indicate to the reviewing court that the agency indeed considered whether or not a categorical exclusion applied and concluded that it did. . . . In most instances, a short statement that a categorical exclusion has been invoked will suffice to assure a reviewing court that environmental effects have been considered." *Id.* at 1139–40 (quoting *Wilderness Watch v. Mainella*, 375 F.3d 1085, 1095 (11th Cir. 2004)); *accord Fritiofson*, 772 F.2d at 1237. The record before this court includes the 1991 EA Report, the 1992 Categorical Exclusion Evaluation, the 2001 Categorical Exclusion Reevaluation, and the 2004 Reevaluation, which resulted in the approval and continuation of Categorical Exclusion status for the project. (Docket Entry Nos. 41, Appendices A–B; 48, Ex. 1). All the reports include an analysis of the requisite considerations, including the project's impact on the soil, invasive species, vegetation, and wildlife, migratory birds, fish, cultural resources, parklands, wetlands, water quality, and coastal zone

management plan. Most relevant to this case, all the reports included a noise analysis of the surrounding area. (Docket Entry No. 41, Appendix A at 24–32; Appendix B at 8–14; Docket Entry No. 48, Exs. 1 at 8–9 & Ex. E; Ex. 1-1 at 30–35).

Defendants argue that this project falls within the nonexclusive list of actions that may qualify under the documented Categorical Exclusion category. That list includes "[m]odernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing)"; and "[b]ridge rehabilitation, reconstruction or replacement." 23 C.F.R. § 771.11 7(d)( 1), (2), (3). In the 1991 EA, TXDOT proposed expanding the traffic capacity of the highway. In the 1992 Categorical Exclusion, TXDOT described the project as including "rehabilitating the pavement, replacing the bridge structures, reconstruction of access ramps, improvements to direct connectors, adding auxiliary lanes, reversing and/or relocating ramps, providing U- turns, etc." (Docket Entry No. 48, Ex. 1 at 2). This general description remained unchanged in the 2001 Reevaluation, which detailed proposed changes for the project. (See Docket Entry No. 41, App. A at 6). Plaintiffs argue that the 2002 Reevaluation described a project that exceeded "rehabilitation" and was not, as defendants argue, presumptively appropriate for Categorical Exclusion status.

A close inspection of the record and comparisons between this case and other cases involving highway projects does not show disputed fact issues material to determining whether the FHWA was arbitrary or capricious in approving and

retaining Categorical Exclusion status for the project. The EA written in 1991 for a much larger proposed highway expansion project (that was never built) described TXDOT ' s intention to add capacity to IH610 by adding four mainlanes on each side of the highway. (Docket Entry No. 48, Ex. 1-1 at 11). After TXDOT scrapped this idea, TXDOT planned the current project, which is designed to improve the highway's ability to handle existing traffic efficiently by improving and "rehabilitating" the existing IH-610/IH-10 interchange, without adding capacity to handle more traffic. TXDOT decided not to add mainlanes that would extend the length of the project, but instead would change ramps, and related mainlanes and connectors, to improve traffic flow. The decision not to add "capacity," TXDOT explained, was not a decision to avoid adding any mainlanes. Instead, TXDOT did not intend to add mainlanes that would generally widen the IH-610 West area at issue. The Categorical Exclusion and Reevaluation reports discussed this distinction. The later reports specifically identify alterations in ramp elevations and the use of "braided" ramps configured so that one goes over another, necessarily requiring increased elevations, to meet the rehabilitation goals. (Docket Entry No. 48, Ex. 1-1 at 11). TXDOT included explicit discussion of elevated ramps in the Categorical Exclusion Reevaluations and the FHWA considered these ramps in approving the Categorical Exclusion status.

The case law supports the FHWA's distinction between "added capacity" projects, which are not eligible for Categorical Exclusion status, and "safety" and "modernization" projects, which are eligible. These cases also support the defendants' motion for

summary judgment that, as a matter of law, their decision to approve this project as a Categorical Exclusion was neither arbitrary nor capricious. In *Public Interest Research Group of New Jersey*, the New Jersey Department of Transportation (NJDOT) received Categorical Exclusion approval for a construction project that added two additional highway lanes for over 21 miles under the same regulatory exception defendants invoke here. 884 F. Supp. at 879–80. In *Florida Keys Citizens Coalition*, the court quoted the FHWA Categorical Exclusion report, which stated, "We find that roadway reconstruction projects that do not increase capacity, but provide safety improvements and replace bridges . . . are normally categorically excluded from detailed NEPA study." 374 F. Supp. 2d at 1132. The court noted that the project at issue (rehabilitation and reconstruction of a bridge within a larger road project) met the "more general requirements of 23 C.F.R. § 771.117(a):

> The FHWA's use of a categorical exclusion is appropriate given the agency's documented determination that Road Safety Improvements will not add any general purpose travel lanes and involve only minimal roadway widening for safety and not capacity improvements, that these improvements will not have significant growth or travel impacts, that the improvements will not induce significant impacts on planned growth or land use or have significant impacts on travel patterns, that they will be entirely within the existing right-of-way, thus, not causing the relocation of significant numbers of people, and that an original Project purpose,

> accommodation of growth in the Florida Keys, was eliminated by downsizing it from the original four lanes to two lanes.

*Fla. Keys Citizens Coalition*, 374 F. Supp. 2d at 1141 (internal citations and footnotes omitted).

Two district courts in this circuit have refused to enjoin or find arbitrary and capricious highway reconstruction projects predicated on this distinction. See *Riverfront Garden Dist. Ass 'n, Inc. v. City of New Orleans*, No. CIV.A.00-544, 2000 WL 1789952, *8 (E.D. La. Dec. 6, 2000) (rejecting challenge to Categorical Exclusion status granted for a portion of road reconstruction that allegedly had a secondary impact on a historically significant area); *J. C. Morris & N. Am. Equip. Co. v. Slater*, No. CIV. A. 398-CV-2092-L, 1998 WL 959658, *1–*2 (N.D. Tex. Jan. 15, 1998) (denying a motion for a preliminary injunction preventing construction that would widen 2.64 miles of a road from two lanes to six lanes and had Categorical Exclusion approval). These cases provide support for the conclusion that the FHWA's Categorical Exclusion approval in this case is not arbitrary and capricious.

Additional comparisons to *Public Interest Research Group of New Jersey* are appropriate. Under earlier regulations, NJDOT prepared an Environmental Assessment and began planning an Environmental Impact Statement. Shortly after NJDOT drafted the EA, however, the FHWA changed its regulations, lowering the requirements for highway projects to qualify for a Categorical Exclusion. The amended regulations added the same "modernization exception," 23 C.F.R. § 771.117(d),

used by TXDOT in this case. Like TXDOT, NJDOT reevaluated the project and submitted documentation to support its claim that the project qualified as a Categorical Exclusion. The FHWA agreed, finding that the project would cause no significant environmental impact. *Public Interest Res. Group of N.J.*, 884 F. Supp. at 881. After receiving approval, NJDOT conducted further studies and decided to alter the construction plan to add high occupancy vehicle lanes instead of standard "mainlanes." *Id.* at 88 1–82. Like TXDOT in the present case, NJDOT submitted a reevaluation study to analyze the effects of the proposed project change. That study concluded that adding HOV lanes would reduce traffic congestion and cause no environmental impact other than noise to the surrounding neighborhoods. *Id.* at 882. To mitigate the noise impact, the reevaluation recommended adding ten barriers. *Id.* The FHWA concluded that with the noise barriers, the revised project would not result in significant environmental impact and approved the continued use of a Categorical Exclusion. *Id.* In evaluating alternatives, NJDOT's report—much like TXDOT's in this case—concluded that no feasible alternatives to construction existed and that no better mitigation measure was feasible or reasonable. *Id.* at 887.

Citizens challenged the New Jersey plan in much the same way as the plaintiffs in this case. The New Jersey plaintiffs argued that the project would cause "significant environmental impact," that NJDOT had misled the public about the level of the noise impact, and that NJDOT's reports and findings contained fatal flaws. The court held that the FHWA was not arbitrary and capricious in both granting

and maintaining the project's Categorical Exclusion status. The FHWA reviewed relevant, appropriate data in making the Categorical Exclusion decision, and the reevaluation allowed the FHWA to revisit its decision if it felt that the changed circumstances or project design would lead to significant environmental impact. Notably, when NJDOT held a public hearing on the matter, it conceded that it had not yet completed noise analysis on the project. *Id.* at 883 n. 12. Like the plaintiffs in this case, the court held that NJDOT's sins of omission at the public hearing were insufficient to render the CE determination arbitrary and capricious. The court noted that the FHWA "need not elevate environmental concerns over other appropriate considerations." *Id.* at 890; *see also Skinner*, 1992 WL 535953, at *13 ("Plaintiff implies that a two-lane version of Alternative II should have been considered by the FHWA, is feasible, prudent and would minimize harm to the park. The FHWA could reasonably find that such an alternative would not accomplish the purpose of the project to serve present and projected traffic volumes and would be inconsistent with the City's Transportation Plan and reject such an alternative for the same reasons *a fortiori* it rejected Alternative II as imprudent.").

In this case, the fact that TXDOT admitted that it had miscalculated part of its noise analysis in the 2001 Reevaluation and issued the revised noise analysis in the 2004 Reevaluation, does not raise a fact issue as to the Categorical Exclusion status determination. The 2004 Reevaluation report stated that "[r]efinements/adjustments in the elevations of the roadways adjacent to this residential area were sufficient to require a new, updated traffic noise

analysis." (Docket Entry No. 41, App. B at 8). TXDOT admitted in July 2004 that the increases to certain roadway elevations in the project design along one section of the project made the noise-impact projections for that section incorrect. Aside from a conclusional statement that "[t]here are still many inconsistencies regarding the new noise analysis" at the end of their reply to the motion for summary judgment (Docket Entry No. 51, ¶87), the plaintiffs do not appear to argue that the 2004 Reevaluation, which the FHWA could have, but did not, use to withdraw the Categorical Exclusion approval, contained inaccurate noise measurements.

The fact that TXDOT and the FHWA recommended mitigation measures does not undermine the ultimate finding of no significant environmental impact (FONSI). As the Fifth Circuit has recently reiterated, an agency's use of a "mitigated FONSI" is permissible. In *Spiller v. White*, 352 F.3d 235 (5th Cir. 2003), the court explained that "an agency or an involved third party" may "agree[ ] to employ certain mitigation measures that will lower the otherwise significant impacts of an activity on the environment to a level of insignificance" to permit "a FONSI [to] be issued for an activity that otherwise would require a full-blown EIS." *Id.* at 241; *see also id.* ("Other circuits have endorsed such a practice.") (citing and further discussing *Cabinet Mountains Wilderness v. Peterson*, 685 F.2d 67[illegible] (D.C. Cir. 1982); *C.A.R.E. Now, Inc. v. FAA*, 844 F.2d 1569 (11th Cir. 1988); *Greenpeace Action v. Franklin*, 14 F.3d 1324 (9th Cir. 1992); *Roanoke River Basin Ass 'n v. Hudson*, 940 F.2d 58 (4th Cir. 1991); *Audobon Soc'y of Cent. Ark. v. Dailey*, 977 F.2d 428 (9th Cir. 1992)). In this

case, the FHWA approved a "mitigated FONSI" by identifying potential noise impact to certain areas and recommending mitigation measures. The agency concluded that mitigation of the noise problems rendered any environmental impact insignificant. In light of the deference owed the agency, the overall nature of the project, and the lack of any other environmental concerns, this determination was not arbitrary or capricious.

The plaintiffs contend that the proposed mitigation measures are ineffective for houses that, like theirs, are affected by the project but not immediately adjacent to the highway. The record shows that after the FHWA designated the project as a Categorical Exclusion, TXDOT modeled the noise level at plaintiffs' residence. The measurement, which TXDOT reported to the plaintiffs in a letter dated February 4, 2004, was 58 dBA, within acceptable limits. (Docket Entry No. 51, Ex. 9). The plaintiffs point out that the 2004 Reevaluation of two TXDOT-placed receivers in their neighborhood reflect noise levels of 76 and 71 dBA, respectively. (*Id.* at 15). According to FHWA standards the plaintiffs submitted, an increase of 15 decibels is considered "substantial" and requires evaluation of mitigation measures. (See Docket Entry No. 59, Ex. 2 at 8, 34). The plaintiffs claim that TXDOT intentionally included low noise-level predictions in the early reports to obtain the Categorical Exclusion, but included the more accurate figures in response to the litigation. Plaintiffs build on this argument to contend that the agencies should permit a more generous cost/benefit analysis in determining which neighborhoods should receive noise barriers. Specifically, the plaintiffs contend that their

neighborhood should receive a noise barrier even if it does not qualify for one under the FHWA-approved formula and even if the homeowners whose residences are closer to highway do not want a barrier.[5] (*Id.*).

Plaintiffs' criticism of the earlier noise-impact projections does not make the FHWA's decision to use the Categorical Exclusion status arbitrary or capricious. The FHWA concluded that the increased noise level in the plaintiffs' neighborhood, considering the reasonable and feasible mitigation measures available, did not mean that the project had a "significant environmental impact" requiring different treatment under NEPA. The FHWA's noise-mitigation inquiry focuses on whether a proposed mitigation measure is reasonable and feasible, not whether the mitigation measure is preferred by all those affected or as effective as those affected would like. The record shows, and the plaintiffs do not appear to dispute, that traffic-noise

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[5] TXDOT required permission from homeowners residing adjacent to the project before erecting any noise barriers. Plaintiffs, who live near the highway but whose condominium does not directly border the highway, object to this method of permitting adjacent homeowners a "veto" over the mitigation method. Plaintiffs have pointed to no regulation or case law prohibiting this approach to noise mitigation. The court notes, however, that the FHWA publication, "Highway Traffic Noise Analysis and Abatement Policy and Guidance," the plaintiffs submitted states that "the views of the impacted residents should be a major consideration in determining the reasonableness of the abatement." (Docket Entry No. 59, Ex. 2 at 59). The plaintiffs have not created a fact issue as to whether the agencies involved in this decision failed to consider the concerns of the affected residents.

levels in plaintiffs' neighborhood exceeded federal standards before the IH610 Rehabilitation Project began. (See, e.g., Docket Entry No. 41, App. B at 12 (listing prerehabilitation project noise levels compared with federal standards)). NEPA "does not impose an affirmative obligation upon the FHWA to study and undertake mitigation measures to improve pre-existing environmental conditions." *Fla. Keys Citizens Coalition*, 374 F. Supp. 2d at 1146–47 (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 35 1–53 (1989)). In 2004, the FHWA and TXDOT reconsidered the noise impacts of the project on neighborhoods near the elevated lanes and connectors and implemented additional mitigation measures. *Cf. id.* at 1147. Plaintiffs have not raised a fact issue as to whether the FHWA's approval of Categorical Exclusion status, based in part on the conclusion that an increase of 4 to 6 decibels (with one receiver going up to 9 decibels, (see Docket Entry No. 41, App. B at 12)), did not constitute a significant environmental impact. FHWA regulations require *consideration* of noise mitigation measures at the levels of increased noise predicted by the plaintiffs and TXDOT in this situation. (See Docket Entry No. 59, Ex. 2 at 8, 34). The agencies considered and implemented such mitigation measures to the extent they found the measures reasonable and feasible, in accordance with FHWA regulations. The record presents no basis for this court to require further or different consideration.

Based on a liberal reading of the pleadings, the plaintiffs appear to argue that the FHWA (in conjunction with TXDOT) improperly "segmented" the highway project into smaller pieces to evade NEPA requirements—namely the EIS requirement.

" 'Segmentation' or 'piecemealing' is an attempt by an agency to divide artificially a 'major Federal action' into smaller components to escape the application of NEPA to some of its segments." *Save Barton Creek Ass 'n v. Fed. Highway Admin.*, 950 F.2d 1129, 1140 (5th Cir. 1992). FHWA regulations establish several factors used to determine whether a project has been improperly segmented. See 23 C.F.R. § 771.111(f). The Fifth Circuit has summarized these factors, explaining that "[s]egmentation becomes suspect . . . only after an evaluation of . . . whether the proposed segment (1) has logical termini; (2) has substantial independent utility; (3) does not foreclose the opportunity to consider alternatives; and (4) does not irretrievably commit federal funds for closely related projects." *Save Barton Creek Ass 'n*, 950 F.2d at 1140. "In the context of a highway within a single metropolitan area, as the case at issue—as opposed to projects adjoining cities—courts have focused more on the factor of 'independent utility.' " *Wilds v. S.C. Dep 't of Transp.*, 9 Fed. App. 114, 120 (4th Cir. 2001) (quoting *Save Barton Creek Ass 'n*, 950 F.2d at 1140) (additional citations omitted).

TXDOT divided the highway project into six segments for construction. The segment at issue is 3.8 miles, beginning at the intersection of I-6 10 and US-59 and ending at the intersection of I-610 and I-10, or the I-610 interchange. The Categorical Exclusion and 2001 Reevaluation both include maps indicating the different segments. (See Docket Entry No. 38, Ex. 1, Ex. A; Docket Entry No. 41, App. A, Ex. A). This portion of highway has "independent utility" because it served as a major connection to two highways (US-59 and I-10) before the project

began. Each piece of the project could be completed independently of the others. Using this division across a major highway is logical—treating the entire construction project would require comprehensive evaluation of disparate areas of the city, different terrain, and different highways. Plaintiffs have not pointed to evidence that might support a finding that the defendants improperly segmented the project in order to omit certain environmentally-sensitive areas from regulatory assessment or otherwise evade NEPA's requirements. *Cf. Named Individual Members of San Antonio Conservation Soc 'y v. Tex. Highway Dep 't (San Antonio I)*, 446 F.2d 1013, 1027 (5th Cir. 1971) (holding that the state had impermissibly segmented a highway project running through a park to evade federal environmental regulations). In fact, because the part of the project at issue, near plaintiffs' residence, is also near Memorial Park, the segmentation most likely *helps* the plaintiffs' case. Instead of evaluating the noise impact on plaintiffs' neighborhood and the potential environmental damage to the park in the context of a 7.53 mile project, the defendants evaluated these potential impacts against a project of only 3.8 miles. Furthermore, the plaintiffs have not identified any specific area or resource harmed by the project but omitted from the administrative record because of the defendants' "segmentation." To the extent that plaintiffs argue that the defendants improperly segmented the project, the claim fails. *Accord One Thousand Friends of Iowa v. Mineta*, 364 F.3d 890, 894 (8th Cir. 2004); *Save Barton Creek Ass 'n*, 950 F.2d at 1144; *Riverfront Garden Dist. Ass 'n*, 2000 WL 1789952, at *9.

The plaintiffs contend that TXDOT and the FHWA failed to hold a "public hearing" as required under 23 U.S.C. § 128. (Docket Entry Nos. 51 at 19; 70 at 15). The plaintiffs did not attend the June 2000 hearing on the project. Although there is a dispute as to the tone of the 2000 hearing, the responsiveness of the officials present to the questions raised, and whether the hearing provided any meaningful opportunity for an exploration of the issues, it is undisputed that the meeting was announced publicly well in advance; that it occurred as scheduled; that knowledgeable TXDOT representatives involved in decisionmaking roles in the project attended; and that citizens attending made oral and written complaints about the plans, including the noise impact. TXDOT displayed schematics that showed the project plans. It is not clear whether the schematics showed the precise elevations of the exit ramp or the mainlanes and connector lanes near the plaintiffs' neighborhood. The record as to the way in which the 2000 meeting was conducted and the schematics presented does not show that TXDOT and the FHWA concealed the fact that the project included these elevated ramps, so as to raise a fact issue as to statutory or regulatory compliance.

This court concludes that the FHWA's contemporaneous documentation reflects its consideration whether a Categorical Exclusion applied to its approval of the IH-610 project at issue and its conclusion that it did. This court concludes that the FHWA's application of a Categorical Exclusion as compliance with NEPA is not arbitrary and capricious. These improvements, by definition and in the spirit of the regulations, fall within the

types of highway modernization activities specifically enumerated under 23 C.F.R. § 771.11 7(d)( 1), (2) and (3) as road restoration, rehabilitation, and reconstruction improvements; shoulder and auxiliary lane additions; and highway safety improvements that do not increase traffic capacity. Based on its past experience with these types of improvements, the FHWA determined that this portion of the IH-610 project warranted a documented Categorical Exclusion. The FHWA's decision is also supported by the documented determination that the project would not add general purpose main travel lanes and instead involved changes in ramps, mainlanes, and connectors for safety and not capacity improvements, that these improvements will not have significant growth impacts, that the improvements will not have significant impacts on planned land use, that they will be largely within the existing right-of-way, not causing the relocation of significant numbers of people, and that an original project purpose—to increase traffic capacity—was eliminated by downsizing the project, which initially focused on adding a large number of mainlanes and greatly widening the highway.

The primary question is whether the highway project would have "significant environmental impact." "According to CEQ regulations, 'significantly' requires an agency to consider the 'context' and 'intensity' of a project's environmental consequences." *Highway J Citizens Group v. Mineta*, 349 F.3d 938, 957 (5th Cir. 2003) (citing 40 C.F.R. § 1508.27(a)–(b)). The record reveals that the area next to plaintiffs' neighborhood already hosted a major freeway and the concomitant visual and noise

impacts. The record reveals that changes to the project over time did increase elevations of the section near the plaintiffs' neighborhood and increased the noise level that would result despite mitigation efforts, in an area where the noise already exceeded federal guidelines. (See, e.g., Docket Entry No. 41, App. B at 12 (listing prerehabilitation project noise levels compared with federal standards)). In light of the deference that the law requires be given to the agency decisions, the substantial competing interests, the overall context of the project, the absence of additional factors of environmental significance, and the potential to mitigate the only identified "significant" environmental impact, the record does not raise a fact issue as to whether the FHWA's decision was arbitrary and capricious.

The plaintiffs have asked this court to issue a preliminary injunction to require a new noise analysis to be conducted under court supervision, with plaintiffs' participation, and to stop the construction until a new court-supervised noise mitigation plan can be developed and approved. (Docket Entry No. 70 at 17–18). The defendants correctly respond that this court lacks authority to grant such relief, and at most could remand to the agencies for further proceedings. That step, however, is dependent on a finding that the agencies violated NEPA in approving the IH-610 Rehabilitation Project as a Categorical Exclusion from more demanding environmental analysis and reporting obligations. Because this court has found that the challenged agency action is neither arbitrary nor capricious, the plaintiffs' application for a preliminary injunction also fails.

## IV. Conclusion

The defendants' motion for summary judgment is granted.[6] The plaintiffs' motion for a preliminary injunction is denied. No later than April 14, 2006, the parties must submit a written statement identifying any remaining issues and, if appropriate, a proposed final judgment.

SIGNED on March 15, 2006, at Houston, Texas.

/s/Lee H. Rosenthal
United States District Judge

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[6] Because this court grants the defendants' motion for summary judgment on the basis of the administrative record, it need not reach the defendants' laches argument.

ORDER entered DENYING Pltfs [80] MOTION to Supplement evidence in record as to [79] MOTION to Correct [77] Memorandum & Opinion, GRANTING Pltfs [79] MOTION to Correct [77] Memorandum & Opinion,.
( Signed by Judge Lee H Rosenthal )
(Entered: 5/30/2006)

**IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION**

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**CIVIL ACTION NO. H-04-2295**
[Docket Entry 82; filed 05/30/06 USCA5-2567]

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WILLIAM WARE and CAROL CAUL,
Plaintiffs,

VS.

UNITED STATES FEDERAL HIGHWAY ADMINISTRATION, et al.,
Defendants

**ORDER**

Plaintiffs William Ware and Carol Caul have filed what they style as "Remaining Claims, Remaining Evidentiary Issues, Motion for Leave to Supplement Record with Additional Affidavits, and Renewed Request for Hearing," (Docket Entry No.

78), a motion to correct that filing, (Docket Entry No. 79), and a motion to supplement the record-out-of time, (Docket Entry No. 80). The defendants have requested entry of final judgment. (Docket Entry No. 81).

Plaintiffs' motion for leave to correct the previous filing is granted. Plaintiffs' substantive motions ask this court to reconsider its previously-issued Memoranda and Orders or Opinions, and is properly analyzed under Rule 59(e) of the Federal Rules of Civil Procedure. A motion filed under Rule 59(e) of the Federal Rules of Civil Procedure should be granted only if the moving party establishes: (1) an intervening change in controlling law; (2) discovery of new evidence previously unavailable; or (3) to correct a clear error of law or prevent manifest injustice. *In re Benjamin Moore & Co.*, 318 F.3d 626, 629 (5th Cir. 2002). The plaintiffs have met none of these requirements.

The plaintiffs inquire about the status of their claim under 23 U.S.C. § 109(i). This court dismissed these claims in the Memorandum and Order issued on September 30, 2005. (See Docket Entry No. 64 at 7–8). Any remaining elements of this claim were subsumed into the NEPA analysis in this court's more recent Memorandum and Opinion. (Docket Entry No. 77). The plaintiffs have failed to show that the FHWA's actions were arbitrary and capricious, for the reasons explained in detail in this court's previous rulings.[1]

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[1] Accordingly, this court denied the motion for a preliminary injunction

Plaintiffs contend that this court may have overlooked evidence, particularly the evidence that plaintiffs submitted with their motion for a preliminary injunction, in granting the defendants' summary judgment motion. This court carefully considered the relevant and admissible evidence. As this court pointed out in its most recent Memorandum and Opinion, the plaintiffs failed to show that analysis and fact finding outside the administrative record is appropriate in this case. (See, e.g., Docket Entry No. 77 at 39–43). This court considered the evidence plaintiffs contend was overlooked.

Plaintiffs again challenge this court's application of *Chevron* to the defendants' actions. This court addressed these and similar arguments in the Memorandum and Opinion issued on March 15, 2006. (See Docket Entry No. 77 at 9–11). The new case law cited by the plaintiffs does not affect this court's previous analysis. As the plaintiffs concede, there is no binding Fifth Circuit law altering the standard of review in NEPA Categorical Exclusion reviews. (Docket Entry No. 79 at 8). No additional arguments raised by the plaintiffs meet the Rule 59(e) standards.

The plaintiffs have failed to meet any of the Rule 59 criteria for reconsideration of this court's previous decisions. Plaintiffs have not shown any reason justifying additional supplementation of the record or demonstrated why they were unable to include this evidence in their earlier pleadings and submissions. The motion for leave to supplement the record is denied. Treating plaintiffs' substantive motion as a motion to reconsider, that motion is also

denied. This court agrees with the defendants that no issues remain. Final judgment dismissing this case will be entered by separate order.

SIGNED on May 30, 2006, at Houston, Texas.

/s/Lee H. Rosenthal
United States District Judge

FINAL JUDGMENT entered.
This case is dismissed with prejudice.
Case terminated on 5/30/06.
( Signed by Judge Lee H Rosenthal )
(Entered: 5/30/2006)

**IN THE UNITED STATES DISTRICT COURT**
**FOR THE SOUTHERN DISTRICT OF TEXAS**
**HOUSTON DIVISION**

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**CIVIL ACTION NO. H-04-2295**
[Docket Entry 83; filed 05/30/06
USCA5-2570]

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WILLIAM WARE and CAROL CAUL,
Plaintiffs,

VS.

UNITED STATES FEDERAL
HIGHWAY ADMINISTRATION, et al.,
Defendants

**FINAL JUDGMENT**

In accordance with this court's Memorandum and Order dated September 30, 2005, this court's Memorandum and Opinion dated March 15, 2006, and this court's order of even date, this case is dismissed with prejudice.

SIGNED on May 30, 2006, at Houston, Texas.

/s/Lee H. Rosenthal
United States District Judge

ORDER entered
GRANTING Pltfs [85] MOTION for Extension of Time notice of appeal,
DENYING Pltfs [84] MOTION to Alter Judgment. The deadline for filing a notice of appeal is extended to 7/14/06. No further extensions will be granted. (Signed by Judge Lee H Rosenthal )
(Entered: 7/6/2006)

**IN THE UNITED STATES DISTRICT COURT**
**FOR THE SOUTHERN DISTRICT OF TEXAS**
**HOUSTON DIVISION**

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**CIVIL ACTION NO. H-04-2295**
[Docket Entry 87; filed 07/06/06
USCA5-2601-2602]

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WILLIAM WARE and CAROL CAUL,
Plaintiffs,
VS.
UNITED STATES FEDERAL HIGHWAY ADMINISTRATION, et al.,
Defendants.

**ORDER**

Plaintiffs William Allan Ware and Carol Caul, proceeding *pro se*, have filed a "Motion to Clarify Or Amend Final Judgment To Dismiss State Defendants Without Prejudice" and a "Motion for Extension of Time To File A Notice Of Appeal Against State Defendants." (Docket Entry Nos. 84,

85). The federal defendants have responded. (Docket Entry No. 86).

This court's September 30, 2005 Memorandum and Order dismissed the state defendants from this case. (Docket Entry No. 64). That detailed Memorandum and Order provides which claims were dismissed with prejudice and which claims were dismissed without prejudice. The Final Judgment, which dismissed this case with prejudice, (Docket Entry No. 83), addressed the merits of the plaintiffs' legal arguments to the extent those claims were not dismissed on the pleadings or because of jurisdictional defect. Further clarification and amendment is not helpful or necessary at this stage. Plaintiffs' motion to clarify or amend the judgment is denied.

To the extent an extension of the time for filing an appeal is necessary, plaintiffs' motion to extend the time for appeal is granted. Plaintiffs must file a notice of appeal by July 14, 2006. No further extensions will be granted.

SIGNED on July 6, 2006, at Houston, Texas.

/s/Lee H. Rosenthal
United States District Judge

# APPENDIX C

FIFTH CIRCUIT ORDER DENYING
PETITION FOR REHEARING

## IN THE UNITED STATES COURT OF APPEALS FOR THE FIFTH CIRCUIT

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No. 06-20637

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[FILE STAMP:
U.S. Court of Appeals
**Filed Jan 18, 2007 (sic)**
Charles F. Fulbruge III, Clerk]

WILLIAM ALLAN WARE; CAROL CAUL
Plaintiffs - Appellants

v.

UNITED STATES FEDERAL HIGHWAY ADMINISTRATION; CURTIS DAN REAGAN, In His Official Capacity as Division Administrator of the Federal Highway Administration Texas Division; J RICHARD CAFKA, In His Official Capacity as Administrator of the Federal Highway Administration;
UNITED STATES DEPARTMENT OF TRANSPORTATION;

MARY E PETERS, In Her Official Capacity as Secretary of Transportation of the United States Department of Transportation;
TEXAS TRANSPORTATION COMMISSION;
RICHARD F WILLIAMSON, In His Official Capacity as Chair Texas Transportation Commission

Defendants - Appellees

**ON PETITION FOR REHEARING**

Before: KING, GARZA, and BENAVIDES, Circuit Judges.

PER CURIAM:

IT IS ORDERED that the petition for rehearing is [handwritten:] denied.

ENTERED FOR THE COURT:

/s/ Emilio M. Garza
United States Circuit Judge

REHG-2

# APPENDIX D

# CONSTITUTIONAL PROVISIONS, TREATIES, STATUTES, ORDINANCES, AND REGULATIONS

## US CONSTITUTION

**Amendment V** *(in part)*

No person shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

## THE TEXAS CONSTITUTION

**Article 1 - BILL OF RIGHTS** *(in part)*
**Section 17 - TAKING, DAMAGING, OR DESTROYING PROPERTY FOR PUBLIC USE; SPECIAL PRIVILEGES AND IMMUNITIES; CONTROL OF PRIVILEGES AND FRANCHISES**

No person's property shall be taken, damaged or destroyed for or applied to public use without adequate compensation being made, unless by the consent of such person; and, when taken, except for the use of the State, such compensation shall be first made, or secured by a deposit of money; and no irrevocable or uncontrollable grant of special privileges or immunities, shall be made; but all

privileges and franchises granted by the Legislature, or created under its authority shall be subject to the control thereof.

# FEDERAL STATUTES & LEGISLATION

## FEDERAL-AID HIGHWAYS

### Title 23 USC § 109 - Standards

[Petitioners brought, *inter alia*, a specific claim through the APA asserting noncompliance with 23 USC § 109(i) – [Noise] Standards and implementing regulations]

**23 USC § 109(i) Standards [Noise]:**

The Secretary, after consultation with appropriate Federal, State, and local officials, **shall develop and promulgate standards for highway noise levels** compatible with different land uses and after July 1, 1972, **shall not approve plans and specifications for any proposed project on any Federal-aid system for which location approval has not yet been secured unless he determines that such plans and specifications include adequate measures to implement the appropriate noise level standards**. [*emphasis added*] The Secretary, after consultation with the Administrator of the Environmental Protection Agency and appropriate Federal, State, and local officials, may promulgate standards for the control of highway noise levels for highways on any Federal-aid system for which

project approval has been secured prior to July 1, 1972. The Secretary may approve any project on a Federal-aid system to which noise-level standards are made applicable under the preceding sentence for the purpose of carrying out such standards. **Such project may include, but is not limited to, the acquisition of additional rights-of-way, the construction of physical barriers, and landscaping**. [*emphasis added*] Sums apportioned for the Federal-aid system on which such project will be located shall be available to finance the Federal share of such project. Such project shall be deemed a highway project for all purposes of this title.

**23 USC § 109(j) - Standards [Adoption of NAAQS]** *(in pertinent part)*:

The Secretary, after consultation with the Administrator of the Environmental Protection Agency, shall develop and promulgate guidelines to assure that highways constructed pursuant to this title **are consistent with any approved plan for- - (1) the implementation of a national ambient air quality standard for each pollutant** for which an area is designated as a nonattainment area under section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)); or (2 the maintenance of a national ambient air quality standard in an area that was designated as a nonattainment area but that was later redesignated by the Administrator as an attainment area for the standard and that is required to develop a maintenance plan under section 175A of the Clean Air Act (42 U.S.C. 7505a).

**23 USC § 109(b) - Standards [Design]** *(in pertinent part)*

The geometric and construction standards ..., as applied to each actual construction project, shall be adequate to enable such project to accommodate the types and volumes of traffic anticipated for such project *for the twenty-year period* commencing on the date of approval by the Secretary, under section 106 of this title, of the plans, specifications, and estimates for actual construction of such project. (*emphasis added*)

**23 USC § 109(h) - Standards [Incorporation of NEPA]** *(in pertinent part)*

Not later than July 1, 1972, the Secretary, after consultation with appropriate Federal and State officials, shall submit to Congress, and not later than 90 days after such submission, promulgate guidelines designed to assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal- aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects and the following:

(1) air, noise, and water pollution;

(2) destruction or disruption of man-made and natural resources, aesthetic values, community cohesion and the availability of public facilities and services;

(3) adverse employment effects, and tax and property value losses;

(4) injurious displacement of people, businesses and farms; and

(5) disruption of desirable community and regional growth.

Such guidelines shall apply to all proposed projects with respect to which plans, specifications, and estimates are approved by the Secretary after the issuance of such guidelines.

**Transportation Equity Act for the 21st Century (112 Stat 232, Public Law 105-178) (June 9, 1998) [set forth as Note to 23 USC 109]**

SEC. 1309 subsections (f),(g), ENVIRONMENTAL STREAMLINING of the Transportation Equity Act for the 21st Century (112 Stat 232, Public Law 105-178) (June 9, 1998) provide in pertinent part as follows:

f) Judicial Review and Savings Clause.--

(1) Judicial review.--Nothing in this section shall affect the reviewability of any final Federal agency action in a district court of the United States or in the court of any State....

(g) Federal Agency Defined.--In this section, the term ``Federal agency'' means any Federal agency or any State agency carrying out affected responsibilities required by operation of Federal law. (*emphasis added*)

**SECTIONS 6001 ET SEQ, SAFE, ACOUNTABLE, FLEXIBLE, EFFICIENT TRANSPORTATION EQUITY ACT: A LEGACY FOR USERS "SAFETEA-LU" (119 STAT 1144, PUBLIC LAW 109-59 (AUGUST 10, 2005) PROVISIONS, HEREAFTER SAFETEA-LU)**

SEC. 6002. EFFICIENT ENVIRONMENTAL REVIEWS FOR PROJECT DECISIONMAKING.

(a) IN GENERAL.—Subchapter I of chapter 1 of title 23, United States Code, is amended by inserting after section 138 the following:

"§ 139. Efficient environmental reviews for project decisionmaking

"(a) DEFINITIONS.—In this section, the following definitions apply:

"(1) AGENCY.—The term 'agency' means any agency, department, or other unit of Federal, State, local, or Indian tribal government.

"(2) ENVIRONMENTAL IMPACT STATEMENT.—The term 'environmental impact statement' means the detailed statement of environmental impacts required to be prepared under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(3) ENVIRONMENTAL REVIEW PROCESS.—

"(A) IN GENERAL.—The term 'environmental review process' means the process for preparing for a

project an environmental impact statement, environmental assessment, categorical exclusion, or other document prepared under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

"(8) STATE TRANSPORTATION DEPARTMENT.—The term 'State transportation department' means any statewide agency of a State with responsibility for one or more modes of transportation

"(k) JUDICIAL REVIEW AND SAVINGS CLAUSE.—

"(1) JUDICIAL REVIEW.—Except as set forth under subsection (l), nothing in this section shall affect the reviewability of any final Federal agency action in a court of the United States or in the court of any State.

(b) EXISTING ENVIRONMENTAL REVIEW PROCESS.—Nothing in this section affects any existing State environmental review process, program, agreement, or funding arrangement approved by the Secretary under section 1309 of the Transportation Equity Act for the 21st Century (112 Stat. 232; 23 U.S.C. 109 note) as such section was in effect on the day preceding the date of enactment of the SAFETEA–LU. (emphasis added)

(c) CONFORMING AMENDMENT.—The analysis for such subchapter is amended by inserting after the item relating to section 138 the following:

"139. Efficient environmental reviews for project decisionmaking.".

(d) REPEAL.—Section 1309 of the Transportation Equity Act for the 21st Century (112 Stat. 232) is repealed.

## GENERAL PROVISIONS

### 1 USC § 109. Repeal of statutes as affecting existing liabilities

The repeal of any statute shall not have the effect to release or extinguish any penalty, forfeiture, or liability incurred under such statute, unless the repealing Act shall so expressly provide, and such statute shall be treated as still remaining in force for the purpose of sustaining any proper action or prosecution for the enforcement of such penalty, forfeiture, or liability. The expiration of a temporary statute shall not have the effect to release or extinguish any penalty, forfeiture, or liability incurred under such statute, unless the temporary statute shall so expressly provide, and such statute shall be treated as still remaining in force for the purpose of sustaining any proper action or prosecution for the enforcement of such penalty, forfeiture, or liability.

**National Environmental Policy Act** *(certain provisions)*

**Sec. 104 [42 USC § 4334].**

Nothing in section 102 [42 USC § 4332] or 103 [42 USC § 4333] shall in any way affect the specific statutory obligations of any Federal agency (1) to comply with criteria or standards of environmental quality, (*emphasis added*) (2) to coordinate or consult with any other Federal or State agency, or (3) to act, or refrain from acting contingent upon the recommendations or certification of any other Federal or State agency.

**Sec. 105 [42 USC § 4335]**

The policies and goals set forth in this Act are *supplementary to* those set forth in existing authorizations of Federal agencies. *(emphasis added)*

# FEDERAL REGULATIONS

[Code of Federal Regulations]
[Title 23, Volume 1]
[Revised as of April 1, 2001]

## TITLE 23 CFR—HIGHWAYS

CHAPTER I--FEDERAL HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

## PART 772--PROCEDURES FOR ABATEMENT OF HIGHWAY TRAFFIC NOISE AND CONSTRUCTION NOISE — (2001 version)

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Table 1 to Part 772 -- Noise Abatement Criteria

Appendix A to Part 772 -- National Reference Energy Mean Emission Levels as a Function of Speed

***Authority***: 23 U.S.C. 109(h), 109(i); 42 U.S.C. 4331, 4332; sec. 339(b), Pub. L. 104-59, 109 Stat. 568, 605; 49 CFR 1.48(b).

Source: 47 FR 29654, July 8, 1982; 47 FR 33956, Aug. 5, 1982, unless otherwise noted.

**Sec. 772.1 Purpose.**

To provide procedures for noise studies and noise abatement measures, to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning and design of highways approved pursuant to title 23 U.S.C.

**Sec. 772.3 Noise standards.**

The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this regulation **constitute the noise standards mandated by 23 U.S.C. 109(i)**. All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards. [*emphasis added*]

**Sec. 772.5 Definitions.**

(a) Design year. The future year used to estimate the probable traffic volume for which a highway is designed. A time, 10 to 20 years, from the start of construction is usually used.

(b) Existing noise levels. The noise, resulting from the natural and mechanical sources and human activity, considered to be usually present in a particular area.

(c) L10. The sound level that is exceeded 10 percent of the time (the 90th percentile) for the period under consideration.

(d) L10(h). The hourly value of L10.

(e) Leq--the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period.

(f) Leq(h). The hourly value of Leq.

(g) **Traffic noise impacts**. Impacts which occur **when the predicted traffic noise levels approach or exceed the noise abatement**

**criteria (Table 1), or when the predicted traffic noise levels substantially exceed the existing noise levels**. [emphasis added]

(h) Type I projects. A proposed Federal or Federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.

(i) Type II projects. A proposed Federal or Federal-aid highway project for noise abatement on an existing highway.

**Sec. 772.7 Applicability.**

(a) Type I projects. This regulation applies to all Type I projects unless it is specifically indicated that a section applies only to Type II projects.

(b) Type II projects. The development and implementation of Type II projects are not mandatory requirements of 23 U.S.C. 109(i) and are, therefore, not required by this regulation. When Type II projects are proposed for Federal-aid highway participation at the option of the highway agency, the provisions of Secs. 772.9(c), 772.13, and 772.19 of this regulation shall apply.

**Sec. 772.9 Analysis of traffic noise impacts and abatement measures.**

(a) The highway agency shall determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts, giving weight to the benefits and cost

of abatement, and to the overall social, economic and environmental effects.

(b) The **traffic noise analysis shall include** the following for each alternative under detailed study: [emphasis added]

(1) Identification of existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the highway;
(2) Prediction of traffic noise levels;
(3) Determination of existing noise levels;
(4) Determination of traffic noise impacts; and
(5) Examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts.

(c) Highway agencies proposing to use Federal-aid highway funds for Type II projects shall perform a noise analysis of sufficient scope to provide information needed to make the determination required by Sec. 772.13(a) of this chapter.

**Sec. 772.11 Noise abatement.**

(a) In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas. Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit.

(b) In those situations where there are no exterior activities to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the

interior criterion shall be used as the basis of determining noise impacts.

(c) If a noise impact is identified, the abatement measures listed in Sec. 772.13(c) of this chapter must be considered.

(d) When noise abatement measures are being considered, every reasonable effort shall be made to obtain substantial noise reductions.

(e) Before adoption of a final environmental impact statement or finding of no significant impact, the highway agency shall identify: impacts for which no apparent solution is available.

(f) The views of the impacted residents will be a major consideration in reaching a decision on the reasonableness of abatement measures to be provided.

(g) The plans and specifications will not be approved by FHWA unless those noise abatement measures which are reasonable and feasible are incorporated into the plans and specifications to reduce or eliminate the noise impact on existing activities, developed lands, or undeveloped lands for which development is planned, designed, and programmed.

**Sec. 772.13 Federal participation.**

(a) Federal funds may be used for noise abatement measures where:

(1) A traffic noise impact has been identified,

(2) The noise abatement measures will reduce the traffic noise impact, and

(3) The overall noise abatement benefits are determined to outweigh the overall adverse social, economic, and environmental effects and the costs of the noise abatement measures.

(b) For Type II projects, noise abatement measures will only be approved for projects that were approved before November 28, 1995, or are proposed along lands where land development or substantial construction predated the existence of any highway. The granting of a building permit, filing of a plat plan, or a similar action must have occurred prior to right-of-way acquisition or construction approval for the original highway. Noise abatement measures will not be approved at locations where such measures were previously determined not to be reasonable and feasible for a Type I project.

(c) The noise abatement measures listed below may be incorporated in Type I and Type II projects to reduce traffic noise impacts. The costs of such measures may be included in Federal-aid participating project costs with the Federal share being the same as that for the system on which the project is located, except that Interstate construction funds may only participate in Type I projects.

(1) Traffic management measures (e.g., traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive land designations).

(2) Alteration of horizontal and vertical alignments.

(3) Acquisition of property rights (either in fee or lesser interest) for construction of noise barriers.

(4) Construction of noise barriers (including landscaping for esthetic purposes) whether within or outside the highway right-of-way. Interstate construction funds may not participate in landscaping.

(5) Acquisition of real property or interests therein (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise. This measure may be included in Type I projects only.

(6) Noise insulation of public use or nonprofit institutional structures.

(d) There may be situations where (1) severe traffic noise impacts exist or are expected, and (2) the abatement measures listed above are physically infeasible or economically unreasonable. In these instances, noise abatement measures other than those listed in Sec. 772.13(c) of this chapter may be proposed for Types I and II projects by the highway agency and approved by the Regional Federal Highway Administrator on a case-by-case basis when the conditions of Sec. 772.13(a) of this chapter have been met.

[47 FR 29654, July 8, 1982; 47 FR 33956, Aug. 5, 1982, as amended at 61 FR 45321, Aug. 29, 1996]

**Sec. 772.15 Information for local officials.**

In an effort to prevent future traffic noise impacts on currently undeveloped lands, highway agencies shall inform local officials within whose jurisdiction the highway project is located of the following:

(a) The best estimation of future noise levels (for various distances from the highway improvement) for both developed and undeveloped lands or properties in the immediate vicinity of the project,

(b) Information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels, and

(c) Eligibility for Federal-aid participation for Type II projects as described in Sec. 772.13(b) of this chapter.

**Sec. 772.17 Traffic noise prediction.**

(a) Any traffic noise prediction method is approved for use in any noise analysis required by this regulation if it generally meets the following two conditions:

(1) The methodology is consistent with the methodology in the FHWA [[Page 393]] Highway Traffic Noise Prediction Model (Report No. FHWA-RD-77-108).*

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*These documents are available for inspection and copying as prescribed in 49 CFR part 7, appendix D.

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(2) The prediction method uses noise emission levels obtained from one of the following:

(i) National Reference Energy Mean Emission Levels as a Function of Speed (appendix A [of the regulations]).

(ii) Determination of reference energy mean emission levels in Sound Procedures for Measuring Highway Noise: Final Report, DP-45-1R.*

(b) In predicting noise levels and assessing noise impacts, traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year shall be used.

**Sec. 772.19 Construction noise.**

The following general steps are to be performed for all Types I and II projects:

(a) Identify land uses or activities which may be affected by noise from construction of the project. The identification is to be performed during the project development studies.

(b) Determine the measures which are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community. This determination shall include a weighing of the benefits achieved and the overall

adverse social, economic and environmental effects and the costs of the abatement measures.

(c) Incorporate the needed abatement measures in the plans and specifications.

## Table 1--Noise Abatement Criteria

[Hourly A-Weighted Sound Level—decibels (dBA)\1\]

| Activity Category | dBA L eq | Description of Land Use Activity Areas | Activity Category |
|---|---|---|---|
| A | 57 (exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. | A |
| B | 67 (exterior) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals. | B |
| C | 72 (exterior) | Developed lands, properties or activities not included in categories A or B above. | C |
| D | — | Undeveloped lands. | D |

| | | | |
|---|---|---|---|
| E | 52 (interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums. | E |

[[Page 394]]

Appendix A to Part 772--National Reference Energy Mean Emission Levels as a Function of Speed

[GRAPHIC] [TIFF OMITTED] TC14OC91.013

## TITLE 40 CFR: CEQ REGULATIONS

**40 CFR Sec. 1502.24 Methodology and scientific accuracy.**

"Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement..." (emphasis added).

# APPENDIX E

# OTHER MATERIAL ESSENTIAL TO UNDERSTAND PETITION

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## INTERPRETIVE GUIDELINES & POLICIES

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## FEDERAL INTERPRETIVE GUIDELINES & POLICIES

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[1995 Memorandum: filed USCA5-1553-1556; and 1995 Policy and Guidance (pertinent part) filed USCA5-1557-1578;
both documents were submitted by Petitioners and were considered to be outside administrative record because they were not submitted by Respondents]

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## MEMORANDUM

**Environment**
**U.S. Department of Transportation**
**Federal Highway Administration**

**Subject: ACTION: Highway Traffic Noise Guidance and Policies and Written Noise Policies**

From: Executive Director

To: Regional Administrators
Federal Lands Highway Program Administrator

Date: June 12, 1995

**Attached for your information and use is a copy of "Highway Traffic Noise Policy and Guidance."** This is a reissuance of existing guidance on highway traffic noise analysis, **completed in response to an audit of the highway traffic noise program by the OIG** and by a desire to reduce and consolidate over 130 pages of existing material. In addition, we are reemphasizing the highway traffic noise program and our commitment to environmental excellence. **A responsive traffic noise program is important to ensure that residents located adjacent to highways receive appropriate noise abatement.**

**It is important that States conduct adequate and fully documented traffic noise analyses.** The attached document is meant to bring together a wide range of independent guidance material into a single consolidated source. It supersedes the following existing FHWA materials: (1) 'Traffic Noise Analysis for Highway Projects Which Add Through-Traffic Lanes" (May 1987); (2) "Type II Projects for Highway Traffic Noise Abatement" (June 1988); (3) "Highway Traffic Noise Analysis and Abatement" (1989); (4) "Highway Traffic Noise: State Highway Agency Policies and Procedures" (April 1989); (5) Discussion Paper: "Appropriate Level of Highway Traffic Noise Analysis for CE, EA/FONSI, and EIS" (June 1989); (6) "Field Review Report: Highway

Traffic Noise Impact Identification and Mitigation Decisionmaking" (June 1989); (7) "Highway Traffic Noise Analysis: Reasonableness and Feasibility of Abatement" (May 1992); and (8) "Guidance for Highway Traffic Noise Analysis" (December 1993).

You should note the changes/additions/reiterations to FHWA traffic noise policies which have occurred as a result of OIG recommendations, as shown on the attachment. It is important to point out that there is a change in existing FHWA policy which puts new restrictions on the approval of Type II abatement. **In addition, other new policy changes include the following:**

- An acceptable cost/residence index for determining the reasonableness of abatement should be within the range of $15,000-50,000/residence. The cost of reasonable abatement may fall outside the acceptable range if there is sufficient additional justification, particularly if severe traffic noise impacts occur.

- The method used to count residences should include all dwelling units, e.g., owner- occupied, rental units, mobile homes, etc., that are "benefitted," regardless of whether or not they were identified as impacted. A State should define the threshold of noise reduction which determines a "benefitted" residence. This threshold should be within the range of 3-5 dBA.

- The "date of public knowledge" cannot precede the date of approval of CEs, FONSIs, or RODs. Previously, FHWA left the determination of this date entirely to a State.

Within 1 year from the date of this memorandum, all SHAs must adopt written statewide noise policies that have been approved by FHWA. Regional Administrators are delegated the authority to approve the State policies. This authority may be redelegated to Division Administrators. The policies must demonstrate substantial compliance with the noise regulations, 23 CFR Part 772, as well as with the reissued noise policies and guidance.

Those regions desiring a Washington office review, should send copies of the draft policies to Bob Armstrong in HEP-41 for review and comment before taking an approval action. One copy of each approved policy should also be sent to HEP-41.

Thank you for assistance in this matter. Questions or comments may be directed to Bob Armstrong or Steve Ronning at (202) 366-2073 or (202) 366-2078, respectively.

(Original signed by) Anthony R. Kane

2 Attachments

**ATTACHMENT**

**Changes/Additions/Reiterations to FHWA Traffic Noise Policies**

- Page 11, paragraph 1: "It is also important to remember that noise abatement consideration should be an inherent project consideration that is not handled separately, but is incorporated and considered in the total project development decision."

- Page 16, paragraph 4: "... after the date of issuance of this guidance, Type II abatement projects for new activities and land uses which come into existence may only be approved if an active local land use control program was adopted prior to existence of the new activities and land uses. EXAMPLE: A Type II noise barrier is requested for homes that were constructed prior to a local community's adoption of an active noise-compatible land use control program. Type II abatement may not be approved for this location. SHAs should be certain to make local officials aware of this requirement."

- Page 18, paragraph 3: "The prevention of future impacts is one of the most important parts of noise control. The compatibility of the highway and its neighbors is essential for the continuing growth of local areas. Both development and highways can be compatible, but local government officials need to know what noise levels to expect from a highway and what techniques they can use to prevent future impacts. States can help by providing this information to local governments; such information should be made available for disclosure in real estate transactions."

- Page 23, paragraph 2: "The project development records should fully document the traffic noise analysis level-of-effort expended, strategies considered, adjacent residents' views and opinions, and a final decision on the reasonableness and feasibility of abatement."

- Page 27, paragraph 1: "Traffic noise analyses should recognize and consider absolute noise levels

as well as incremental increases in noise levels when identifying traffic noise impacts and when considering noise abatement measures."

- Pages 55 and 56, paragraphs 8 and 1: "SHAs typically determine reasonable cost by using a cost index, usually with residences representing people impacted. Most SHAs use a cost/residence index, while some use a cost/residence/dBA reduction. An acceptable cost/residence index should be within the range of $15,000-50,000/residence. Other acceptable indices, such as cost/residence/dBA reduction, should be shown to be within this range for cost/residence. The cost of reasonable abatement may fall outside the acceptable range if there is sufficient, additional justification, particularly if severe traffic noise impacts occur.

**The method used to count residences is important and should be clearly delineated. The number of residences should include all dwelling units, e.g., owner-occupied, rental units, mobile homes, etc. When counting residences to determine reasonableness, all "benefitted" residences should be included, regardless of whether or, not they were identified as impacted (each unit in a multi-family building should be counted as one residence in determining both impacts and benefits).** A State should define the threshold of noise reduction which determines a "benefitted" residence. This threshold should be within the range of 3-5 dBA.

- Page 76, paragraph 2: "The FHWA has previously left entirely to a State the determination

of the "date of public knowledge." However, **from now on, the "date of public knowledge" cannot precede the date of approval of CEs, FONSIs, or RODs.**

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(source: downloaded:
http ://www.fhwa.dot.govienvironment/noise/polpap_m.htm)

# HIGHWAY TRAFFIC NOISE ANALYSIS AND ABATEMENT POLICY AND GUIDANCE

by

U.S. Department of Transportation
Federal Highway Administration
Office of Environment and Planning
Noise and Air Quality Branch
Washington, D.C.

June 1995

[USCA5-1557-1578: Table of contents, figures, and tables plus Policy And Guidance pp 1-18 included here; document in entirety filed as Application for Preliminary Injunction; PL EXHIBIT 2 – C]

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## INTRODUCTION

Studies have shown that some of the most pervasive sources of noise in our environment today are those associated with transportation. Traffic

noise tends to be a dominant noise source in our urban as well as rural environment. In response to the problems associated with traffic noise, the United States Code of Federal Regulations Part 772

(23 CFR 772), "Procedures for Abatement of Highway Traffic Noise and Construction Noise," establishes standards for mitigating highway traffic noise.

The purpose of this document is to provide Federal Highway Administration (FHWA) policies and guidance for the analysis and abatement of highway traffic noise. A 3Y2-day training course, sponsored by the National Highway Institute, is available for instructing FHWA field and State highway agency (SHA) staffs in the details of the policies and the technical procedures required for analyzing and abating traffic noise impacts.

## LEGISLATION

Effective control of the undesirable effects of highway traffic noise requires that (1) land use near highways be controlled, (2) vehicles themselves be quieted, and (3) mitigation of noise be undertaken on individual highway projects.

The first component is traditionally an area of local responsibility. The other components are the joint responsibility of private industry and of Federal, State, and local governments.

### Land Use Planning and Control

The Federal Government has essentially no authority to regulate land use planning or the land development process. The FHWA and other Federal agencies encourage State and local governments to practice land use planning and control in the vicinity of highways. The FHWA advocates that local governments use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized.

Some State and local governments have enacted legislative statutes for land use planning and control. As an example, the State of California has legislation on highway noise and compatible land use development. This State legislation requires local governments to consider the adverse environmental effects of noise in their land development process. In addition, the law gives local governments broad powers to pass ordinances relating to the use of land, including among other things, the location, size, and use of buildings and open space. Wisconsin has a State law which requires formal adoption of a local resolution supporting the construction of a proposed noise barrier and documenting the existence of local land use controls to prevent the future need for noise barriers adjacent to freeways and expressways.

Although some other States and local governments have similar laws, the entire issue of land use is extremely complicated with a vast array of competing considerations entering into any actual land use control decisions. For this reason, it is

nearly impossible to measure the progress of using land use to control the effects of noise.

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**Source Control**

The Noise Control Act of 1972 gives the Federal Environmental Protection Agency (EPA) the authority to establish noise regulations to control major sources of noise, including transportation vehicles and construction equipment. In addition, this legislation requires EPA to issue noise emission standards for motor vehicles used in Interstate commerce (vehicles used to transport commodities across State boundaries) and requires the FHWA Office of Motor Carrier Safety (OMCS) to enforce these noise emission standards.

The EPA has established regulations which set emission level standards for newly manufactured medium and heavy trucks that have a gross vehicle weight rating (GVWR) of more than 4,525 kilograms and are capable of operating on a highway or street. **Table 1** shows the maximum noise emission levels allowed by the EPA noise regulations for these vehicles.

| **Table 1**: Maximum Noise Emission Levels as Required by EPA for Newly Manufactured Trucks with GVWR Over 4,525 Kilograms | |
|---|---|
| Effective Date | January 1, 1988 |
| Maximum Noise Level 15 Meters from Centerline of Travel Using the Society of Automotive Engineers, Inc. (SAE), test procedure for acceleration under 56 kph | 80 dBA |

For existing (in-use) medium and heavy trucks with a GVWR of more than 4,525 kilograms, the Federal government has authority to regulate the noise emission levels only for those that are engaged in interstate commerce. Regulation of all other in-use vehicles must be done by State or local governments. The EPA emission level standards for in-use medium and heavy trucks engaged in interstate commerce are shown in **Table 2** and are enforced by the FHWA OMCS.

| **Table 2:** Maximum Noise Emission Levels as Required by EPA for In-Use Medium and Heavy Trucks with GVWR Over 4,525 Kilograms Engaged in Interstate Commerce | | |
|---|---|---|
| Effective Date | Speed | Maximum Noise Level 15 Meters from Centerline of Travel |
| January 8, 1986 | < 56 kph | 83 dBA |
| January 8, 1986 | > 56 kph | 87 dBA |
| January 8, 1986 | Stationary | 85 dBA |

**Highway Project Noise Mitigation**

The National Environmental Policy Act (NEPA) of 1969 provides broad authority and responsibility for evaluating and mitigating adverse environmental effects including highway traffic noise. The NEPA directs the Federal government to use all practical means and measures to promote the general welfare and foster a healthy environment.

A more important Federal legislation which specifically involves abatement of highway traffic noise is the Federal-Aid Highway Act of 1970. This law mandates FHWA to develop noise standards for mitigating highway traffic noise. (*emphasis added*)

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The law requires promulgation of traffic noise-level criteria for various land use activities. The law

further provides that FHWA not approve the plans and specifications for a federally aided highway project unless the project includes adequate noise abatement measures to comply with the standards. The FHWA has developed and implemented regulations for the mitigation of highway traffic noise in federally-aided highway projects.

The FHWA regulations for mitigation of highway traffic noise in the planning and design of federally aided highways are contained in 23 CFR 772. The regulations require the following during the planning and design of a highway project: (1) identification of traffic noise impacts; (2) examination of potential mitigation measures; (3) the incorporation of reasonable and feasible noise mitigation measures into the highway project; and (4) coordination with local officials to provide helpful information on compatible land use planning and control. The regulations contain noise abatement criteria which represent the upper limit of acceptable highway traffic noise for different types of land uses and human activities. The regulations do not require that the abatement criteria be met in every instance. Rather, they require that every reasonable and feasible effort be made to provide noise mitigation when the criteria are approached or exceeded. Compliance with the noise regulations is a prerequisite for the granting of Federal-aid highway funds for construction or reconstruction of a highway. (*emphasis added*)

## NOISE FUNDAMENTALS

As we all know, sound is created when an object moves; the rustling of leaves as the wind

blows, the air passing through our vocal chords, the almost invisible movement of the speakers on a stereo. The movements cause vibrations of the molecules in air to move in waves like ripples on water. When the vibrations reach our ears, we hear what we call sound.

Noise is defined as unwanted sound. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. Sound is composed of various frequencies, but the human ear does not respond to all frequencies. Frequencies to which the human ear does not respond must be filtered out when measuring highway noise levels. Sound-level meters are usually equipped with weighting circuits which filter out selected frequencies. It has been found that the A-scale on a sound-level meter best approximates the frequency response of the human ear. Sound pressure levels measured on the A-scale of a sound meter are abbreviated dBA.

In addition to noise varying in frequency, noise intensity fluctuates with time. In the past few years, there has been a definite trend toward the use of the equivalent (energy-average) sound level as the descriptor of environmental noise in the U.S. The equivalent sound level is the steady- state, A-weighted sound level which contains the same amount of acoustic energy as the actual time-varying, A-weighted sound level over a specified period of time. If the time period is 1 hour, the

descriptor is the hourly equivalent sound level, Lq(h), which is widely used by SHAs as a descriptor of traffic noise. An additional descriptor, which is sometimes used, is the L10. This is simply the A-weighted sound level that is exceeded 10 percent of the time.

A few general relationships may be helpful at this time in understanding sound generation and propagation. First, as already mentioned above, decibels are logarithmic units. Consequently, sound levels cannot be added by ordinary arithmetic means. A chart for decibel addition is shown in Table 1. From this table it can be seen that the sound pressure level from two equal sources is 3 dB greater than the sound pressure level of just one source. Therefore, two trucks producing 90 dB each will combine to produce 93 dB, not 180 dB. In other words, a doubling of the noise source produces only a 3 dB increase in the sound pressure level. Studies have shown that this increase is barely detectable by the human ear.

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**Table 3**: Decibel Changes, Loudness, and Energy Loss

| Sound Level Change | Relative Loudness | Acoustic Energy Loss |
|---|---|---|
| 0 dBA | Reference | 0 |
| -3 dBA | Barely Perceptible Change | 50% |
| -5 dBA | Readily | 67% |

| | Perceptible Change | |
|---|---|---|
| -10 dBA | Half as Loud | 90% |
| -20 dBA | 1/4 as Loud | 99% |
| -30 dBA | 1/8 as Loud | 99.9% |

**Table 4:**
Rules for Combining Sound Levels by "Decibel Addition"

For noise levels known or desired to an accuracy or +/-1 decibel (acceptable for traffic noise analyses):

| When two decibel values differ by | Add the following amount to the higher value |
|---|---|
| 0 or 1 dB | 3 dB |
| 2 or 3 dB | 2 dB |
| 4to9 dB | 1 dB |
| 10 dB or more | 0 dB |

Secondly, an increase or decrease of 10 dB in the sound pressure level will be perceived by an observer to be a doubling or halving of the sound. For example, a sound at 70 dB will sound twice as loud as a sound at 60 dB.

Finally, sound intensity decreases in proportion with the square of the distance from the source. Generally, sound levels for a point source will decrease by 6 dBA for each doubling of distance. Sound levels for a highway line source vary differently with distance, because sound pressure waves are propagated all along the line and overlap

at the point of measurement. A long, closely spaced continuous line of vehicles along a roadway becomes a line source and produces a 3 dBA decrease in sound level for each doubling of distance. However, experimental evidence has shown that where sound from a highway propagates close to "soft" ground (e.g., plowed farmland, grass, crops, etc.), the most suitable dropoff rate to use is not 3 dBA but rather 4.5 dBA per distance doubling. This 4.5 dBA dropoff rate is usually used in traffic noise analyses.

For the purpose of highway traffic noise analyses, motor vehicles fall into one of three categories: (1) automobiles - vehicles with two axles and four wheels, (2) medium trucks - vehicles with two axles and six wheels, and (3) heavy trucks - vehicles with three or more axles. The emission levels of all three vehicle types increase as a function of the logarithm of their speed.

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The level of highway traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of the traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks. Vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any condition (such as a steep incline) that causes heavy laboring of motor vehicle engines will also increase traffic noise levels. In addition, there are other, more complicated factors that affect the loudness of traffic

noise. For example, as a person moves away from a highway, traffic noise levels are reduced by distance, terrain, vegetation, and natural and manmade obstacles. Traffic noise is not usually a serious problem for people who live more than 150 meters from heavily traveled freeways or more than 30 to 60 meters from lightly traveled roads.

## FHWA NOISE REGULATIONS

The current FHWA procedures for highway traffic noise analysis and abatement are contained in 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." These procedures specify the requirements that SHAs must meet when using Federal-aid funds for highway projects.

This discussion will address those requirements and point out the most important issues related to the requirements. Each paragraph of 23 CFR 772 will be presented in boldface type and followed by a discussion of that paragraph.

Some parts are self-explanatory and need only a sentence or two of discussion. Other, more complicated paragraphs will have greater discussion.

**77 \: PURPOSE.** To provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, to supply noise abatement criteria, and to establish requirements for information to be given to local officials for use in the planning

and design of highways approved pursuant to Title 23, United States Code (U.S.C.).

The protection of the public's health and welfare is an important responsibility that FHWA helps to accomplish during the planning and design of a highway project. The U.S. Congress has directed that this be done when the 1970 Federal-Aid Highway Act was passed. Concerned citizens and States encouraged Congress to provide this protection.

**772.3: NOISE STANDARDS.** The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this directive constitute the noise standards mandated by 23 U.S.C. 109(i). All highway projects which are developed in conformance with this directive shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards.

This paragraph makes the whole 23 CFR 772 the FHWA noise standard. The standard is required by 23 U.S.C. 109(i). Some people mistake the noise abatement criteria for the FHWA standard. Early on, FHWA did not want to be restricted to specific noise levels that may not be achieved in most highway projects. So, a standard was developed that would best serve the public in terms of protection and reasonable cost.

**772.5: DEFINITIONS**

a. **Design Year** - the future year used to estimate the probable traffic volume for which

a highway is designed. A time, 10 to 20 years, from the start of construction is usually used.

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b. **Existing Noise Levels** - the noise, resulting from the natural and mechanical sources and human activity, considered to be usually present in a particular area.

c. $L_{10}$- the sound level that is exceeded 10 percent of the time (the 90th percentile) for the period under consideration.

d. $L_{10}$**(h)** - the hourly value of $L_{10}$.

e. $L_{eq}$ - the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period.

f. $L_{eq}$**(h)** - the hourly value of L.

g. **Traffic Noise Impacts** - impacts which occur when the predicted traffic noise levels approach or exceed the noise abatement criteria (Table 5), or when the predicted traffic noise levels substantially exceed the existing noise levels.

h. **Type I Projects** - a proposed Federal or Federal-aid highway project for the construction of a highway on new location or the physical alteration of an existing highway which significantly changes either the

horizontal or vertical alignment or increases the number of through-traffic lanes.

i. **Type II Proiects** - a proposed Federal or Federal-aid highway for noise abatement on an existing highway.

Most of these definitions are self-explanatory. However, the definition for "Traffic Noise Impacts" warrants further attention. A traffic noise impact occurs when the predicted levels approach or exceed the noise abatement criteria (NAC) or when predicted traffic noise levels substantially exceed the existing noise level, even though the predicted levels may not exceed the NAC. This definition reflects the FHWA position that traffic noise impacts can occur under either of two separate conditions: (1) when noise levels are unacceptably high (absolute level); or (2) when a proposed highway project will substantially increase the existing noise environment (substantial increase). In order to adequately assess the noise impact of a proposed project, both criteria must be analyzed. While the FHWA noise regulations do not define "approach or exceed, all SHAs must establish a definition of "approach" that is at least 1 dBA less than the NAC for use in identifying traffic noise impacts in traffic noise analyses. (*emphasis added*)

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| **Table 5: Noise Abatement Criteria (NAC)** Hourly A-Weighted Sound Level in Decibels (dBA)* | | | |
|---|---|---|---|
| Activity Category | $L_{eq}(h)$ | $L_{10}(h)$ | Description of Activity Category |
| A | 57 (Exterior) | 60 (Exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| B | 67 (Exterior) | 70 (Exterior) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals. |
| C | 72 (Exterior) | 75 (Exterior) | Developed lands, properties, or activities not included in Categories A or B above. |
| D | — | -- | Undeveloped lands. |
| E | 52 (Interior) | 55 (Interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, |

| | | | |
|---|---|---|---|
| | | | hospitals, and auditoriums. |

Either Leq(h) or $L_{10}$(h) (but not both) may be used on a project.

NOTE: These sound levels are only to be used to determine impact. These are the absolute levels where abatement must be considered. Noise abatement should be designed to achieve a substantial noise reduction - not the noise abatement criteria.

In developing the NAC contained in the noise regulations, the FHWA attempted to strike a balance between that which is most desirable and that which is feasible. Factors such as technical feasibility, the unique characteristics of highway-generated noise, cost, overall public interest, and other agency objectives were important elements in the process of setting a standard. Establishing values for the NAC was approached by attempting to balance the control of future increases in highway noise levels and the economic, physical, and aesthetic considerations related to noise abatement measures. Numerous approaches were considered in establishing the criteria, including (1) hearing impairment, (2) annoyance, sleep, and task interference or disturbance, and (3) interference with speech communication. The first deals in terms of very loud noises seldom encountered for a highway project beyond the roadway proper. The second approach was desirable in principle but was insufficiently researched to be useful in practice. However, the third approach - speech interference - was usefully applied to the problem of highway traffic noise. Thus, it should be remembered that the NAC are based upon noise levels associated with interference of speech communication and that the

NAC are a compromise between noise levels that are desirable and those that are achievable. FHWA believes that our regulations provide a well-balanced approach to the problem of highway-traffic-generated noise.

The NAC are not magical numbers. Traffic noise impacts can occur below the NAC. The NAC should not be viewed as Federal standards or desirable noise levels; they should not be used as design goals for noise barrier construction. All of the regulations contained in 23 CFR 772 constitute the standards mandated by the Federal-Aid Highway Act of 1970. Noise abatement should be designed to achieve a substantial noise reduction, which SHAs have defined in practice to be in the range of 5-10 dBA. The NAC should only be used as absolute values which, when approached or exceeded, require the consideration of traffic noise abatement measures.

The 23 CFR 772 purposefully provides the SHAs with flexibility to establish their own definition of "substantial increase." A 10 dBA increase in noise levels is a doubling of the perceived loudness. A 15 dBA increase in noise levels represents more than a doubling of the loudness. Factors such as available resources, the public's attitudes

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toward highway traffic noise, and the absolute noise levels may influence a State's definition. The FHWA will accept a well-reasoned definition that is

uniformly and consistently applied. Several SHA definitions have evolved and are shown in **Table 6.**

**Table 6**: Criteria Used by States to Define "Substantial"

| | Increase (dB) | **Subjective Descriptor** |
|---|---|---|
| Criteria 1 | 0-5 | Little increase |
| | 5-15 | Some increase |
| | >15 | Substantial increase |
| Criteria 2 | <10 | Little increase |
| | >10 | Substantial increase |
| Criteria 3 | 0-5 | No increase |
| | 5-10 | Minor increase |
| | 10-15 | Moderate increase |
| | >15 | Substantial increase |

The use of subjective descriptors to describe traffic noise impacts is not required. **Traffic noise impacts occur based upon the definition contained in 23 CFR 772. This definition does not contain subjective descriptors. If impacts are identified, noise abatement measures must be considered and implemented if found to be reasonable and feasible**. When analyzing the reasonableness of abatement, SHAs should consider the relationship between the absolute noise levels and the extent of the increase over existing noise levels for a given situation. A small increase at a higher absolute level (e.g., 70 dBA to 75 dBA) can be more important and justify greater consideration than a similar increase at a lower absolute level (e.g,

50 dBA to 55 dBA). Likewise, a large increase at a lower absolute level (e.g., 40 dBA to 55 dBA) can be less important and justify less consideration than a similar increase at a higher absolute level (e.g., 55 dBA to 70 dBA). (*emphasis added*)

**772.7: APPLICABILITY:**

a. **Type I Projects.** This directive applies to all Type I projects unless it is specifically indicated that a section applies only to Type II projects.

b. **Type II Projects.** The development and implementation of Type II projects are not mandatory requirements of 23 U.S.C. 109(i) and are, therefore, not required by this directive. When Type II projects are proposed for Federal-aid highway participation at the option of the highway agency, the provisions of paragraphs 6, 8, and 11 of this directive shall apply.

The regulation applies to all Type I and Type II projects. The implementation of a Type II program is optional and not mandatory.

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**772.9: ANALYSIS OF TRAFFIC NOISE IMPACTS AND ABATEMENT MEASURES**

a. The highway agency shall determine and analyze expected traffic noise impacts and alternative noise abatement measures to mitigate these impacts, giving weight to the

benefits and cost of abatement, and to the overall social, economic and environmental effects.

b. The traffic noise analysis shall include the following for each alternative under detailed study:
   (1) identification of existing activities, developed lands, and undeveloped lands for which development is planned, designed and programmed, which may be affected by noise from the highway;
   (2) prediction of traffic noise levels;
   (3) determination of existing noise levels;
   (4) determination of traffic noise impacts; and
   (5) examination and evaluation of alternative noise abatement measures for reducing or eliminating the noise impacts.

c. Highway agencies proposing to use Federal-aid highway funds for Type II projects shall perform a noise analysis of sufficient scope to provide information needed to make the determination required by paragraph 772.13a of
this directive.

Paragraph 772.9a is the major requirement for doing noise analyses on all

Type I projects. However, this requirement includes the evaluation of noise reduction benefits, abatement cost, and social, economic, and environmental (SEE) effects. This evaluation

requires a balancing by the SHA of benefits versus disbenefits. This can be a difficult task because very little guidance exists on this topic. Noise reduction benefits and abatement cost will be discussed in detail in paragraph 772.11. The process of balancing noise abatement and the SEE effects of the mitigation is strongly influenced by the public involvement process. The people who live next to the highway project can best evaluate if the abatement benefits will outweigh the SEE effects. The SHAs should not do this evaluation without public involvement. It is also important to remember that noise abatement consideration should be an inherent project consideration that is not handled separately but is incorporated and considered in the total project development decision.

Paragraph 772.9b lists the minimum requirements needed to adequately evaluate the impacts and abatement for each alternative under detailed study for the proposed highway project. The analysis should present the noise impacts and evaluation of alternative abatement measures in a comparative format. In this way, the potential noise impacts and likely abatement measures associated with the various alternatives, including the "no-build" alternative, are clearly defined. Detailed procedures on how to do the analysis exists in the text of the National Highway Institute noise training course, "Fundamentals and Abatement of Highway Traffic Noise."

Paragraph 772.9b(1) requires the identification of existing activities and developed lands. This identification includes not only the type (e.g., residential, commercial), but the number or

extent of activities. This quantification is often overlooked in the analysis. The extent of the noise impact on the people living near the highway project cannot be evaluated correctly without the quantification of the existing activities.

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Paragraph 772.9b(1) also requires noise analysis for undeveloped lands for which development is "planned, designed, and programmed." The terms "... planned, designed, and programmed ..." mean that: 1) a definite commitment has been made to develop the property in question, and 2) there is also official knowledge (such as through a public agency) that such development has been "planned, designed, and programmed." A definite commitment means that a developer has shown a definite interest to develop the land within a reasonable period of time and has reached a point where he can no longer practically change his plans.

The exact date for determining when undeveloped land is "... planned, designed, and programmed" for development is not specified in 23 CFR 772. Each SHA and accompanying FHWA Division Office should establish a mutually acceptable specific date that is appropriate for the development process in their respective State. One specific date that has evolved is the date of issuance of a building permit. Other dates used by States include the date of final approval of the development plan and the date of recording of the plat plan. Any of these dates are in conformance with FHWA policy.

## 772.11: NOISE ABATEMENT

a. In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas. Abatement will usually be necessary only where frequent human use occurs and a lowered noise level would be of benefit.

b. In those situations where there are no exterior activities to be affected by the traffic noise, or where the exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion shall be used as the basis of determining noise impacts.

In most situations, if the exterior area can be protected, the interior will also be protected. The selection of the exterior area where "frequent human use occurs" is very important. This requires a site visit to determine whether people are using the entire exterior area or only a small portion, like a patio or porch. Some States choose the right-of-way line (a point farthest away from a house) to be on the conservative side when doing the noise impact analysis. Interior use applies mostly to hospitals and schools.

Interior noise level predictions may be computed by subtracting from the predicted exterior levels the noise reduction factors for the building in question. If field measurements of these noise reduction factors are obtained or the factors are calculated from detailed acoustical analyses, the measured or calculated reduction factors should be

used. In the absence of such calculations or field measurements, the noise reduction factors may be obtained from the following table (7):

| **Table 7**: Building Noise Reduction Factors Noise Reduction Due to Exterior of the | | |
|---|---|---|
| Building Type | Window Condition | Structure |
| All | Open | 10 dB |
| Light Frame | Ordinary Sash (closed) | 20 dB |
| | Storm Windows | 25 dB |
| Masonry | Single Glazed | 25 dB |
| Masonry | Double Glazed | 35 dB |

NOTE: The windows shall be considered open unless there is firm knowledge that the windows are in fact kept closed almost every day of the year.

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c. If a noise impact is identified, the abatement measures listed in paragraph 772.13c of this directive must be considered.

This self-explanatory paragraph requires (sic) consideration of noise abatement when noise impacts occur. As noted in paragraph 772.5g, noise impacts occur when noise levels approach or exceed the noise abatement criteria or (sic) when predicted levels substantially exceed existing levels. Consequently, this paragraph requires consideration of noise abatement for both of these types of noise impacts.

d. When noise abatement measures are being considered, every reasonable effort shall be made to obtain substantial noise reductions.

Abatement must provide at least a 5 dBA reduction in highway traffic noise levels in order to provide noticeable and effective attenuation. When noise abatement is proposed, it is recommended that an attempt be made to achieve the greatest reduction possible. SHAs have generally defined substantial reduction to be in the range of 5-10 dBA.

This paragraph does not say to reduce to the noise abatement criteria; it says **"substantial noise reductions."** (sic) Consequently, a projected noise level of Leq 69 for a Category B activity (see Table 5) should not be abated merely to the noise abatement criterion of Leq 67, but rather a substantial reduction should be obtained (at least 5 dBA). The choice of what minimum reduction to strive for is certainly a subjective one and is probably related to data found in technical literature, such as the following table.

**Table 8: Relationship Between Decibel, Energy, and Loudness**

| A-Level Down | Remove% of Energy | Divide Loudness by |
|---|---|---|
| 3 dBA | 50 | 1.2 |
| 6 dBA | 75 | 1.5 |
| 10 dBA | 90 | 2 |
| 20 dBA | 99 | 4 |

A reduction of 10 dBA (say 75 dBA to 65 dBA) will be perceived by the public as a halving of the loudness. This is an easily recognizable change. 5 dBA and 7 dBA changes can also be recognized, but to a lesser degree. Two points should be kept in mind: (1) any reduction will improve the noise environment in such areas as annoyance, speech interference, task interference, etc., and (2) no matter what the reduction, until the level reaches a very low level (about Leq = 55 dBA), the noise environment will continue to be dominated by traffic noise that is clearly audible.

e. Before adoption of a final environmental impact statement or finding of no significant impact, the highway agency shall identify:
   (1) noise abatement measures which are reasonable and feasible and which are likely to be incorporated in the project, and
   (2) noise impacts for which no apparent solution is available.

This paragraph ties the noise regulation to the NEPA requirements. An important point is that the requirements for the draft environmental impact statement (EIS) are the same as the final. Therefore, the information for both 772.11e(1) and 772.11e(2) are needed in the draft EIS and the final EIS. The choice of the word "likely" was deliberate. If a decisionmaker is to make an informed decision and if the public is to be made aware of the impacts, the State must make its intentions (sic) known. If the State later decides that mitigation is not warranted, the decision

should have strong support. If the State would like to qualify the word "likely," this is acceptable. When a project involves consideration of more than one barrier, a statement of "likelihood" for. each barrier should be included in the environmental document. The following is an illustration of some appropriate words.

> Based on the studies so far accomplished, the State intends to install noise abatement measures in the form of a barrier at————————. These preliminary indications of likely abatement measures are based upon preliminary design for a barrier cost of $—— that will reduce the noise level by——dBA for——residents. If it subsequently develops during final design that these conditions have substantially changed, the abatement measures might not be provided. A final decision of the installation of the abatement measure(s) will be made upon completion of the project design and the public involvement processes.

f. The views of the impacted residents will be a major consideration in reaching a decision on the reasonableness of abatement measures to be provided.

The views of the impacted residents should be a major consideration in determining the reasonableness of traffic noise abatement measures for proposed highway construction projects. The views should be determined and addressed during the environmental phase of project development. The

will and desires of the general public should be an important factor in dealing with the overall problems of highway traffic noise. SHAs should incorporate traffic noise consideration in their on-going activities for public involvement in the highway program, i.e., the residents' views on the desirability and acceptability of abatement need to be reexamined periodically during project development.

g. The plans and specifications will not be approved by FHWA unless those noise abatement measures which are reasonable and feasible are incorporated into the plans and specifications to reduce or eliminate the noise impact on existing activities, developed lands, or undeveloped lands for which development is planned, designed, and programmed.

This is a summary statement of the requirements in the 1970 Federal-Aid Highway Act [23 U.S.C. 109(i)].

The key words in this paragraph are "reasonable" and "feasible." For a thorough explanation of reasonableness and feasibility of abatement, see the discussion on pp. 50-56.

**772.13: FEDERAL PARTICIPATION**

a. Federal funds may be used for noise abatement measures where:
   (1) a traffic noise impact has been identified,
   (2) the noise abatement measures will reduce the traffic noise impact, and

(3) the overall noise abatement benefits are determined to outweigh the overall adverse social, economic, and environmental effects and the costs of the noise abatement measures.

Paragraph 772.13a identifies the simple rules that guide the funding of noise abatement on highway projects. These rules apply to both Type I and Type II projects.

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Federal-aid highway funds may not be used as payment or compensation for a traffic noise impact through the purchase of a noise easement from a property owner. The FHWA noise regulations clearly indicate that Federal funds may only be used to reduce traffic noise impacts and provide noise abatement benefits. Monetary compensation accomplishes neither of these requirements.

Federal-aid funds may be used in compensation paid during right-of-way negotiations for a partial taking of property. Noise, air quality, access, visual quality, etc. are frequently considered jointly in determining this compensation, which is regarded as part of right-of-way acquisition, not environmental mitigation.

b. For Type II projects, noise abatement measures will not normally be approved for those activities and land uses which come into existence after May 14, 1976. However, noise abatement measures may be approved for activities and land uses which come into

existence after May 14, 1976, provided local authorities have taken measures to exercise land use control over the remaining undeveloped lands adjacent to highways in the local jurisdiction to prevent further development of incompatible activities.

Paragraph 772.13b limits funding participation for retrofit barriers on existing highways because in 1976 FHWA publicly stated that local governments must help control noise impacts through noise-compatible land-use planning and zoning. However, it is important to remember that this paragraph does not prohibit the approval of Type II barriers after 1976. It says that the land use activity (housing development) built near a highway after 1976 usually cannot get a Type II barrier unless the local government has an active land use control program to prevent future incompatible activities (e.g., zoning requirements, noise-sensitive growth and development procedures, local ordinances). The FHWA has not rigidly applied this requirement in the past. However, after the date of issuance of this guidance, Type II abatement projects for new activities and land uses which come into existence may only be approved if an active local land use control program was adopted prior to existence of the new activities and land uses. (sic) EXAMPLE: A Type II noise barrier is requested for homes that were constructed prior to a local community's adoption of an active noise-compatible land use control program. Type H abatement may not be approved for this location. SHAs should be certain to make local officials aware of this requirement (see paragraph 772.15 on page 18).

c. The noise abatement measures listed below may be incorporated in Type I and Type II projects to reduce traffic noise impacts. The costs of such measures may be included in Federal-aid participating project costs with the Federal share being the same as that for the system on which the project is located, except that Interstate construction funds may only participate in Type I projects.

(1) traffic management measures (e.g., traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive land designations),

(2) alteration of horizontal and vertical alignments,

(3) acquisition of property rights (either in fee or lesser interest) for construction of noise barriers,

(4) construction of noise barriers (including landscaping for aesthetic purposes) whether within or outside the highway right-of-way. Interstate construction funds may not participate in landscaping,

[Policy and Guidance page 13]

(5) acquisition of real property or interests therein (predominately unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise.

This measure may be included in Type I projects only, and

(6) noise insulation of public use or nonprofit institutional structures.

Two important points about this paragraph are: (1) the participating share is the same as that for the system on which the project is located; (2) buffer zones can only be used in Type I projects. The potential use of buffer zones applies to predominantly unimproved property. This authority is not used to purchase homes or developed property to create a noise buffer zone. It is used to purchase unimproved property to preclude future noise impacts where development has not yet occurred.

Although most noise mitigation has been implemented along Interstate highways, Federal funds may be used for mitigation measures along other types of highways if the noise impacts exist and the criteria in 772.13a are met.

The most-used abatement measure is the noise barrier; however, paragraph 772.11c requires consideration of all the abatement measures listed in paragraph 772.13c. Noise insulation may only routinely be considered for public use or nonprofit institutional structures, e.g., churches, schools, hospitals, libraries, etc. Private dwellings may only be noise-insulated under the provisions of Section 772.13d.

The purchase of a noise easement, in locations where traffic noise impacts are expected to occur or already exist, should not be considered as a noise abatement measure. It does not reduce noise levels

or abate the impacts. It only provides monetary compensation and is, thus, not eligible for Federal-aid participation.

d. There may be situations where (1) severe traffic noise impacts exist or are expected, and (2) the abatement measures listed above are physically infeasible or economically unreasonable. In these instances, noise abatement measures other than those listed in paragraph 771.13c of this directive may be proposed for Type I and II projects by the highway agency and approved by the Regional Federal Highway Administrator on a case-by-case basis when the conditions of paragraph 772.13a of this directive have been met.

This paragraph allows the States the flexibility to propose innovative noise abatement measures when severe traffic noise impacts are anticipated and normal abatement measures are physically infeasible or economically unreasonable. In these instances, the Regional Federal Highway Administrator may approve a State's request for unusual or extraordinary abatement measures on a case-by-case basis. When considering extraordinary abatement measures, the State must demonstrate that the affected activities experience traffic noise impacts to a far greater degree than other similar activities adjacent to highway facilities, e.g, residential areas with absolute noise levels of 75 dBA Leq(h) or more, residential areas with noise level increases of 30 dBA or more over existing noise levels. Examples of extraordinary abatement measures would be the noise insulation of private

residences or the purchase of private dwellings from willing sellers.

**772.15: INFORMATION FOR LOCAL OFFICIALS** In an effort to prevent future traffic noise impacts on currently undeveloped lands, highway agencies shall inform local officials within whose jurisdiction the highway project is located of the following:

a. The best estimation of future noise levels (for various distances from the highway improvement) for both developed and undeveloped lands or properties in the immediate vicinity of the project,

[Policy and Guidance page 14]

b. Information that may be useful to local communities to protect future land development from becoming incompatible with anticipated highway noise levels, and

c. eligibility for Federal-aid participation for Type II projects as described in paragraph 772.13b of this directive.

The prevention of <u>future</u> impacts is one of the most important parts of noise control. The compatibility of the highway and its neighbors is essential for the continuing growth of local areas. Both development and highways can be compatible. But, local government officials need to know what noise levels to expect from a highway and what techniques they can use to prevent future impacts. States can help by providing this information to local

governments; such information should be made available for disclosure in real estate transactions.

Highway traffic noise should be reduced through a program of shared responsibility. Thus, the FHWA encourages State and local governments to practice compatible land use planning and control in the vicinity of highways. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. Local officials should be made aware of the requirement for the adoption of an active noise-compatible land use control program for approval of Type II abatement (see paragraph 772.13b on page 16).

**772.17: - TRAFFIC NOISE PREDICTION**

a.. Any traffic noise prediction method is approved for use in anynoise analysis required by this directive if it generally meets the following two conditions:

(1) The methodology is consistent with the methodology in the FHWA Highway Traffic Noise Prediction Model (Report No. FHWA-RD-77-108).

(2) The prediction method uses noise emission levels obtained from one of the following:

(a) National Reference Energy Mean Emission Levels as a Function of Speed (Figure 1).
(b) Determination of reference energy mean emission levels in "Sound Procedures for Measuring Highway Noise: Final Report," Report No. DP-45-11L

b. In predicting noise levels and assessing noise impacts, traffic characteristics which will yield the worst hourly traffic noise impact on a regular basis for the design year shall be used.

Most States use the FHWA highway traffic noise prediction model (FHWA model) with its national emission levels. If a State uses different emission levels, documentation must be provided to the FHWA Division Office to justify its use. Paragraph 772.17a(2)(b) specifies that the method in Report No. DP-45-1R be used to obtain these emission levels. The FHWA Division Office should forward the proposed emission levels to FHWA Headquarters for review and comment. Some States have modified computer versions of the FHWA model to change input/output characteristics to suit the State's design process.

[Policy and Guidance page 15]

Traffic characteristics used in predicting future noise levels could make a substantial difference in the results. "Worst hourly traffic noise impact" occurs at a time when truck volumes and vehicle speeds are the greatest, typically when traffic is free-flowing and at or near level of service C

conditions. The numbers of medium and heavy trucks are very important.

SHAs should use either the posted speed limit or the operating speed (highest overall speed at which a driver can travel on a given highway under favorable weather conditions and under prevailing traffic conditions, without at any time exceeding the safe speed as determined by the design speed on a section-by-section basis) to predict traffic noise levels. SHAs are required to use the operating speed if it is determined to be consistently higher than the posted speed limit. In determining the operating speed along an existing highway, the first step is to identify the time period during which the worst traffic noise impacts are expected to occur. Then, the speed may be determined by actually driving a vehicle in the traffic stream and recording the average speed. It may also be determined by using radar meters or other devices to measure speeds at a point along the highway (making no adjustments to the actual instrument measurements). Such measured speeds are then arithmetically averaged to calculate a time mean speed (as defined in Highway Capacity Manual: Special Report 209). Either the "traffic stream" speed or the time mean speed can be used to represent the operating speed.

## 772.19. CONSTRUCTION NOISE

The following general steps are to be performed for all Types I and II projects:

a. Identify land uses or activities which may be affected by noise from construction of the

project. The identification is to be performed during the project development studies.

b. Determine the measures which are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community. This determination shall include a weighing of the benefits achieved and the overall adverse social, economic, and environmental effects and the costs of the abatement measures.

c. Incorporate the needed abatement measures in the plans and specifications.

The impact of construction noise does not appear to be serious in most instances. FHWA Technical Advisory T 6160.2, "Analysis of Highway Construction Noise," outlines procedures for the analysis of highway construction noise. The following items should be considered to ensure that potential construction noise impacts are given adequate consideration during highway project development:

a. Calculation of construction noise levels is usually not necessary for traffic noise analyses. If a construction noise impact is anticipated at a particular sensitive receptor, use of the model contained in "Highway Construction Noise: Measurement, Prediction, and Mitigation" to predict construction noise levels should be sufficient. The computerized prediction model HICNOM is quite sophisticated and requires considerable input,

and, therefore, should be used only on highly complex or controversial major urban projects.

b. Potential impacts of highway construction noise should be addressed in a general manner for traffic noise analyses. The temporary nature of the impacts should be noted. An indication of the types of construction activities that can be anticipated and the noise levels typically associated with these activities can be obtained from existing literature and presented in the noise analysis.

[Policy and Guidance page 16]

c. Utilizing a common-sense approach, traffic noise analyses should identify measures to mitigate potential highway construction noise impacts. Low-cost, easy-to-implement measures should be incorporated into project plans and specifications (e.g., work-hour limits, equipment muffler requirements, location of haul roads, elimination of "tail gate banging," reduction of backing up for equipment with alarms, community rapport, complaint mechanisms).

d. Major urban projects with unusually severe highway construction noise impacts require more extensive analyses. Sensitive receptors should be identified, existing noise levels should be measured, construction noise levels should be predicted, and impacts should be discussed so as to properly indicate their severity. Mitigation measures likely to be incorporated into these projects may be quite

NOTE: Automobiles: All vehicles with two axles and four wheels
Medium Trucks: All vehicles with two axles and six wheels
Heavy Trucks: All vehicles with three or more axles



USCAS 1578

# STATE OF TEXAS
# INTERPRETIVE
# GUIDELINES & POLICIES

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**Excerpts from**
**Guidelines For Analysis and Abatement**
**Of Highway Traffic Noise**
**June 1996**
(hereafter TxDOT Guidelines)

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**Texas Department of Transportation/**
**Environmental Affairs Division**

**Included in this Appendix:**

TxDOT Guidelines Introduction
..... pp 1-4; USCA5-1091-1094

TxDOT Guidelines, Table 2 Noise Relationships
.....p13; USCA5-1104

TxDOT Guidelines, Table 3 Changes vs Loudness
.....p14; USCA5-1105

TxDOT Guidelines, Table 4 Noise Levels
.....p15; USCA5-1106

TxDOT Guidelines, FHWA Noise Abatement
Criteria .....p46; USCA5-1137]

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**TxDOT Guidelines Introduction**
[pp 1-4; USCA5-1091-1094; emphasis added except where noted]

## I. INTRODUCTION

**These guidelines have been approved by the Federal Highway Administration (FHWA).**

### A. Purpose

1. The purpose of this document is to provide basic guidelines for performing traffic noise analyses for Texas Department of Transportation (TxDOT) highway projects, and **includes a discussion of the fundamentals of sound and traffic noise, the traffic noise analysis process and associated documentation.**

2. These guidelines supersede all previous TxDOT Noise Guidelines and associated correspondence.

### B. References

1. **Title 23, Code of Federal Regulations, Part 772 (23 CFR 772), "Procedures for Abatement of Highway Traffic Noise and Construction Noise", August 1982.**

2. **FHWA "Highway Traffic Noise Analysis and Abatement Policy and Guidance", June 1995.**

3. Title 43, Texas Administrative Code, Chapter 2, "Environmental Policy", March 1995.

**C. Applicability: these guidelines apply to all federal, federal-aid and state funded Type I highway projects.**

1. Type I Project: a proposed highway project for the construction of a highway on a new location or the physical alteration of an existing highway that **substantially changes either the horizontal or vertical alignment**, or increases the number of through-traffic lanes.

2. Type II Project: a proposed highway project for noise abatement on an existing highway (sometimes referred to as a "retrofit" project).

a. The November 1995 National Highway System (NHS) Bill restricts federal participation in Type II barriers to those that: 1) were approved before the date of enactment of the NHS Bill, or 2) are proposed along lands that were developed or were under substantial construction before approval of the acquisition of the rights of way for, or construction of, an existing highway.

b. The development and implementation of Type II highway projects are not mandatory requirements of federal law or regulation.

c. TxDOT does not have a Type II Noise Abatement Program.

**D. Scope**

1. These guidelines apply to typical TxDOT highway projects. They cannot and do not cover every conceivable situation or contingency. They are designed to allow sufficient flexibility to

permit an effective analysis of unique or atypical highway projects. Contact TxDOT's Environmental Affairs Division (ENV) for any additional guidance/assistance, as necessary.

2. A detailed discussion of the FHWA approved traffic noise modeling software is beyond the scope of this document. A comprehensive user's manual will be provided separately.

3. Although a traffic noise analysis may include preliminary dimensions and locations of noise barriers, a detailed discussion of noise barrier design specifications and construction techniques is also beyond the scope of this document. A comprehensive noise barrier design manual will be provided separately.

**E. Compliance**

1. **Compliance with 23 CFR 772 is a prerequisite for granting federal-aid highway funds for construction or reconstruction of a highway.**

2. **These guidelines were developed in accordance with 23 CFR 772 and FHWA Policy and Guidance for Highway Traffic Noise Analysis and Abatement; therefore, compliance with these guidelines is also a prerequisite for granting federal-aid highway funds for construction or reconstruction of a highway.**

**F. Responsibilities**

1. TxDOT/ Environmental Affairs Division (ENV):

a. develop and publish TxDOT Guidelines for Analysis and Abatement of Highway Traffic Noise, and provide changes/updates, as necessary.

b. review, evaluate and approve traffic noise analyses and any associated noise abatement proposals.

Guidelines for Analysis and Abatement of Highway Traffic Noise

c. submit noise abatement proposals to FHWA for approval.

d. conduct training in traffic noise analysis and associated computer modeling.

e. provide guidance and assistance to TxDOT districts, as necessary. June 1996

f. maintain a comprehensive statewide noise barrier database and provide periodic updates to FHWA, as required.

g. publish and maintain an informative noise barrier brochure.

h. develop and publish a comprehensive user's manual for the FHWA approved traffic noise Modeling software.

2. TxDOT district/area offices:

a. perform traffic noise analyses according to the latest TxDOT Guidelines for Analysis and Abatement of Highway Traffic Noise.

b. submit traffic noise analyses/noise abatement proposals to TxDOT/ENV for approval.

c. review and evaluate all traffic noise analyses performed by consultants before submitting to TxDOT/ENV.

d. ensure all personnel responsible for conducting traffic noise analyses receive initial and recurring training in the proper use and application of these guidelines, traffic noise modeling software and sound meters.

e. conduct noise workshops to inform the public about a noise abatement proposal and/or to solicit public opinion regarding a noise abatement proposal, as necessary.

f. maintain a comprehensive noise barrier database and provide periodic updates to TxDOT/ENV, as required.

2. Consultants under contract to perform traffic noise analyses for TxDOT:

a. conduct traffic noise analyses according to the latest TxDOT Guidelines for Analysis and Abatement of Highway Traffic Noise.

b. obtain/use the latest FHWA approved traffic noise modeling software and associated training.

**G. Background**

1. The National Environmental Policy Act (NEPA) of 1969 provides broad authority and responsibility for evaluating and mitigating adverse environmental effects, including highway traffic noise. NEPA directs the federal government to use all practical means and measures to promote the general welfare and foster a healthy environment.

**2. The federal legislation that specifically involves abatement of highway traffic noise is the Federal-Aid Highway Act of 1970. This law mandates FHWA to develop noise standards for mitigating highway traffic noise and requires promulgation of traffic noise-level criteria for various land use activities.**

**3. The FHWA regulations for highway traffic noise analysis and abatement during the planning and design of federally aided highway projects are contained in 23 CFR 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise", August 1982.**

**4. In June 1995, FHWA reissued existing guidance on highway traffic noise analyses in a consolidated document entitled "Highway Traffic Noise Analysis and Abatement Policy and Guidance."**

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**TxDOT Guidelines, Table 2: Noise Relationships**
[p13; USCA5-1104]

**4. Sources: The primary sources of highway traffic sounds are the tires, engine and exhaust of the various types of vehicles present.**

a. The level of traffic sounds generally depends on the overall number, type and speed of the vehicles (especially trucks) and the distance between the source (traffic) and. the receiver (human). Any condition (such as a steep incline) that causes heavy laboring of a vehicle's engine will also affect the overall level of traffic sounds.

b. There are additional, more complicated factors that affect the level of traffic sounds, including: elevated or depressed highways/terrain, surface absorption, dense vegetation and shielding from buildings, fences or walls.

c. Some of the more common factors that influence the level of traffic sounds at a receiver are outlined in **Table 2**. These cause-and-effect relationships can be used throughout the traffic noise analysis to double-check preliminary and final calculations; however, they are not to be used in the place of actual sound level measurements and/or modeling.

(Table 2: next page)

| Table 2: CAUSE and EFFECT RELATIONSHIPS (dBA) | | |
|---|---|---|
| **Change**** | **Increase** | **Decrease** |
| Traffic count doubled | 3 | |
| Speed limit lowered by 5 mph | | 1 |
| Depressed highway | | 3-5(+) |
| Elevated highway | | 3-5*** |
| Distance doubled over pavement | | 3 |
| Distance doubled over grass | | 4.5 |
| Effects are Cumulative | | |
| Speed limit lowered by 5 mph + Distance doubled over grass | | 5.5 |

*** These figures are approximations and are not to be used to calculate sound levels.**

** Assumes that all other factors remain constant.

*** For nearby receivers - may actually increase slightly at more distant receivers because of possible reductions in shielding and/or surface absorption.

**TxDOT Guidelines, Table 3:**
**Changes vs Loudness** [p14; USCA5-1105]

5. Loudness: The term "loudness" is used to describe the manner in which people perceive the intensity of sound.

a. The loudness level is based on a subjective comparison of different sounds under controlled laboratory conditions.

b. The human ear is a far better detector of relative (comparative) differences in sound levels than absolute levels. Table 3 depicts the relationship between changes in sound levels and the perceived change in loudness.

| Table 3: SOUND LEVEL CHANGE vs LOUDNESS | |
|---|---|
| Sound Level Change | Relative Loudness |
| 1 dBA | No perceptible change |
| 3 dBA | Barely perceptible change |
| **5 dBA** | **Readily perceptible change** |
| **10 dBA increase** | **Perceived as twice as loud** |

**B. Noise:** Noise is commonly defined as unwanted sound. However, as indicated in the above discussion on loudness, the determination of "unwanted" is very subjective and can vary substantially from one person to another. **Therefore, the Federal Highway Administration (FHWA) has established absolute and relative criteria to more objectively determine when traffic sounds reach levels that result in impacts for humans.**

**1. Absolute Criterion: Under this criterion, a noise impact occurs when the predicted noise level approaches, equals or exceeds the FHWA Noise Abatement Criteria (NAC) (page 29).**

**2. Relative Criterion: Under this criterion, a noise impact occurs when the predicted noise level "substantially exceeds" the existing level even if it does not approach, equal or exceed the NAC (page 29).**

C. Sound/Noise Levels: Representative sound pressure levels (decibels) for a variety of common outdoor and indoor areas/activities are depicted in **Table 4.** (next page)

**TxDOT Guidelines, FHWA Noise Abatement Criteria p46; USCA5-1137]**

• Consideration and evaluation of measures to reduce noise impacts. The FHWA has established the following **Noise Abatement Criteria (NAC) for various land use activity areas** that are used as one of two means to determine when a traffic noise impact will occur.

| FHWA NOISE ABATEMENT CRITERIA | | |
|---|---|---|
| Activity Category | dBA L eq | Description of Land Use Activity Areas |
| A | 57 (exterior) | Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose. |
| B | 67 (exterior) | Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals. |

| | | |
|---|---|---|
| C | 72 (exterior) | Developed lands, properties or activities not included in categories A or B above. |
| D | — | Undeveloped lands. |
| E | 52 (interior) | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums. |

[Italics original]

*A noise impact occurs when either the absolute or relative criterion is met:*

***Absolute criterion**: the **predicted** noise level at a receiver **approaches, equals or exceeds the NAC**. **"Approach"** is defined as one dBA below the NAC. For example: a noise impact would occur at a Category B residence if the noise level is predicted to be **66 dBA** or above.*

***Relative criterion**: the **predicted** noise level substantially exceeds the existing noise level at a receiver even though the predicted noise level does not approach, equal or exceed the NAC. **"Substantially exceeds " is defined as more than 10 dBA**. For example: a noise impact would occur at a. Category B residence if the existing level is **54 dBA** and the predicted level is **65 dBA** (11 dBA increase).*

[Italics original]

## Results of Respondents' 2004 prediction of traffic noise levels for for receiver points adjacent to Petitioners' neighborhood only; other receiver/stakeholders along interchange not analyzed; no contours for elevated highways

*Impermissible interpretation follows with emphasis; report approved by Federal Respondents 08/20/06 before initial scheduling conference but not delivered to district court until 10/26/04*

[p 12 of 2004 Reevaluation; USCA5-1010; header text is rotated to fit in appendix text boundaries]

*continued next page; header rows repeated*

| **Table 4: Traffic Noise Levels (dBA Leq)** | | | | | | |
|---|---|---|---|---|---|---|
| **Receiver** | NAC Category | NAC Level | **Existing 1999** | **Predicted 2019** | Change (+1-) | Noise Impact |
| RI | B | 67 | 72 | 76 | +4 | Y |
| R2 | B | 67 | 71 | 76 | +5 | Y |
| R3 | B | 67 | 71 | 77 | +6 | Y |
| R4 | B | 67 | 72 | 77 | +5 | Y |
| R5 | B | 67 | 71 | 77 | +6 | Y |
| R6 | B | 67 | 72 | 77 | +5 | Y |
| R7 | B | 67 | 73 | 77 | +4 | Y |
| R8 | B | 67 | 73 | 78 | +5 | Y |

| Table 4: Traffic Noise Levels (dBA Leq) *cont'd* | | | | | | |
|---|---|---|---|---|---|---|
| **Receiver** | NAC Category | NAC Level | **Existing 1999** | **Predicted 2019** | Change (+1-) | Noise Impact |
| R9 | B | 67 | 69 | 78 | +9 | Y |
| R10 | B | 67 | 73 | 77 | +4 | Y |
| R11 | B | 67 | 72 | 77 | +5 | Y |
| R12 | B | 67 | 73 | 77 | +4 | Y |
| R13 | B | 67 | 71 | 76 | +5 | Y |
| R14 | B | 67 | 71 | 76 | +5 | Y |

Before any abatement measure can be incorporated into the project, it must be both feasible and reasonable. In order to be feasible, the measure must reduce noise levels by at least five dBA **at impacted receivers** (sic; emphasis added); and to be reasonable it cannot exceed $25,000 **for each receiver** (sic; emphasis added) that would benefit by a reduction of at least five dBA.